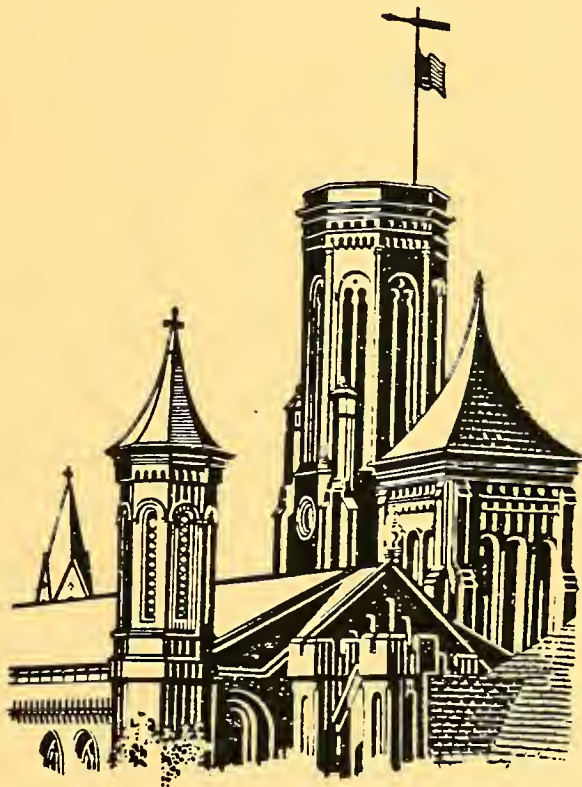


154
OPB
Copy

SMITHSONIAN INSTITUTION

FIVE-YEAR PROSPECTUS
FY 1984 - FY 1988



January 24, 1983

T A B L E O F C O N T E N T S

	<u>Page</u>
INTRODUCTION	1
SCIENCE	16
HISTORY AND ART	31
PUBLIC SERVICE	43
MUSEUM PROGRAMS	50
SPECIAL PROGRAMS	63
ASSOCIATES PROGRAMS	75
BUSINESS MANAGEMENT ACTIVITIES	81
ADMINISTRATIVE, FINANCIAL, AND OTHER SUPPORT SERVICES	88
FACILITIES PLANNING, CONSTRUCTION, RESTORATION AND RENOVATION	96
BEYOND 1988	110
APPENDIX: SMITHSONIAN OPERATING RESOURCES FY 1975-FY 1988 IN CONSTANT 1982 DOLLARS	120
TABLES AND CHARTS	
1. SMITHSONIAN INSTITUTION: SOURCE OF OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	10
2. SMITHSONIAN INSTITUTION: APPLICATION OF OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	11
3. APPLICATION OF SCIENCE OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	28

4. APPLICATION OF HISTORY AND ART OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	38
5. APPLICATION OF PUBLIC SERVICE OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	48
6. APPLICATION OF MUSEUM PROGRAMS OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	59
7. APPLICATION OF SPECIAL PROGRAMS OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	71
8. APPLICATION OF ASSOCIATES PROGRAMS OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	79
9. APPLICATION OF BUSINESS MANAGEMENT OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	85
10. APPLICATION OF ADMINISTRATIVE, FINANCIAL, AND SUPPORT ACTIVITIES OPERATING FUNDS, FY 1982 AND PROJECTED THROUGH FY 1988	94
11. NATIONAL ZOOLOGICAL PARK REDEVELOPMENT AND FRONT ROYAL CONSERVATION CENTER IMPROVEMENTS, FY 1982-88	101
12. FACILITIES PLANNING, RESTORATION, RENOVATION AND OTHER CONSTRUCTION, FY 1983 AND PROJECTED THROUGH FY 1988	104
13. ESTIMATED RESOURCES ASSOCIATED WITH QUADRANGLE PROGRAMS AND OPERATIONS, FY 1984-88	119
14. SMITHSONIAN OPERATING FUNDS, FISCAL YEARS 1975, 1982 AND 1988 IN ACTUAL AND CONSTANT 1982 DOLLARS	122
CHART A: SMITHSONIAN OPERATING FUNDS IN CONSTANT 1982 DOLLARS, FISCAL YEARS 1970, 1975, 1982, 1984, 1988	123
ORGANIZATION CHART OF THE SMITHSONIAN INSTITUTION	124

At the meeting of the Board of Regents, January 24, 1983, it was

VOTED that the Board of Regents approves
the Five-Year Prospectus dated January 24,
1983, covering the fiscal years 1984 to
1988, anticipating that annual revisions
will similarly be presented for its
approval.

S. Dillon Ripley
Secretary

SMITHSONIAN INSTITUTION

FIVE-YEAR PROSPECTUS

FY 1984 - 1988

INTRODUCTION

James Smithson bequeathed the whole of his property "to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men." In doing so, he created a charitable trust, through the terms of which the United States would serve as trustees for purposes directed toward the benefit of all mankind. By the Act of July 1, 1836, Congress accepted Smithson's bequest, and pledged the "faith of the United States" to carry out its purposes. In the Act of August 10, 1846, Congress established the Institution in its present form and placed responsibilities for management with a Board of Regents.

The Smithsonian is a unique combination of a privately endowed and governmentally supported institution administered by a Board composed of both ex officio governmental officials and governmentally selected citizens. This arrangement has made possible the remarkable achievements of the Institution during the 136 years of its existence. Over the years, this unique Institution has come to be regarded as one of the world's most important repositories for both private and public collections and for contributions from donors who wish to support the increase and diffusion of knowledge. The great National Collections now consist substantially of private gifts. Continuing additions to the Smithsonian's trust funds have expanded and nourished the Institution's usefulness. Appropriations recommended by the President (who is ex officio a member of the Smithsonian Establishment) and approved by Congress have provided steadily increasing federal support for many of the Smithsonian's far-reaching services to the public. Through the development of the Smithsonian Associate programs, the Institution now has a nationwide group of interested supporters who sponsor many of its educational activities across the country.

The Smithsonian Institution's programs are devoted to public education, research, and national service in the arts, sciences, and history. Centered on the Mall in Washington, D.C., it also operates major facilities and activities elsewhere in Washington, across the country, and overseas. It is one of the world's leading research centers and encompasses the world's largest museum complex, attracting approximately 26,000,000 visitors annually to its museums, galleries, and zoological park. Additional millions of people also view Smithsonian traveling exhibitions, which appear throughout the United States and abroad, and its annual folklife festival. As custodian of the National Collections, it processes more

than 78,000,000 art objects, natural history specimens, and artifacts. The collections are displayed for the enjoyment and education of visitors and are utilized for research by the staff of the Institution and by hundreds of visiting students, scientists, and historians each year. Other significant study efforts draw their data and results directly from terrestrial, marine, and astrophysical observations made in the field or located in data collections of various Smithsonian installations.

The broad goal of the Smithsonian Institution is the increase and diffusion of knowledge about Man, his culture and his environment. To accomplish this, the Smithsonian conducts a wide range of programs, many of which are joint ventures in cooperation with other institutions, universities, and government agencies in the United States and on every continent. As an outgrowth of basic scientific research, fundamental data are assembled for use by planners and research workers in other organizations, both government and private. Much of this activity fosters conservation, and can be expected to lead to results that are directly applicable to national needs and goals. Historical research, which enhances knowledge of this nation's growth through studies of technological development, art, and folklife and folklore traditions, also is a major endeavor.

The results of the Institution's research are disseminated to a wide audience through books, monographs, exhibit catalogues, and education pamphlets. Public-oriented programs include exhibits, performances, radio, television, and Smithsonian magazine. The management and care of the National Collections and a program for the selective acquisition of important items are basic commitments. Administration and support functions, including the development and care of facilities, protection and management services, serve the program elements of the Institution.

In the fall of 1977, the Regents and the Secretary established a five-year forward planning process covering all activities of the Institution. This process has proven to be a useful mechanism for management to examine development alternatives and to communicate important results and information to the Institution's Congressional authorizing and appropriations committees, and to other interested constituents. The Five-Year Prospectus, FY 1984-88 is the fifth in a series of documents resulting from that action.

The process is an annual one and involves the preparation of plans and resource projections by each of the Smithsonian's organizations. The review of these materials by appropriate executive staff members occurs throughout the spring and summer months simultaneously with the assembly of the federal and trust budgets for the forthcoming fiscal year. A draft Prospectus is prepared and submitted to the Regents for initial consideration in September of each year. Following the Regents' approval of the forthcoming budgets in September, and the review in November by the Office of Management and Budget of the Institution's federal budget request, the Prospectus is adjusted and prepared for approval by the Regents at their January meeting. If approved, it is distributed to the

Institutions's various Congressional committees at about the same time as the request for Congressional appropriations.

The Prospectus represents a summary of the areas that will be given priority and emphasis over the next five years and contains a chapter which describes some of the Institution's longer-range facility and operating objectives, projecting various activities ahead to about FY 1995. The Prospectus should be read in conjunction with another publication, the Smithsonian Institution's Programs and Activities, which provides background information on the programs of each of the Institution's operating activities. The content presented here is arranged by the major organization grouping of the Institution and corresponds to the assembly of the FY 1984 budget which will be presented to the Congress; i.e., Science, History and Art, Public Service, and Museum Programs, with separate sections treating Special Programs, Associate Programs, Business Management Activities, and administrative and facilities development plans. Several items discussed in the text, along with the financial figures for FY 1984, complement the Institution's budget submission to the Office of Management and Budget, and also appear in that document.

The Prospectus reflects needs and opportunities that the Smithsonian has described before. It emphasizes selected aspects of the Institution's work while assuring that others will continue at approximately the present level of activity. Areas of emphasis include collections management, security of collections and other property, automation of records and systems where possible, basic research, exhibition programs, administrative and technical support, the maintenance of current facilities, the completion of most work for the Zoological Park at Rock Creek and the Front Royal Conservation Center, and the successful establishment of Quadrangle facilities. The Museum Support Center, now under construction at Suitland, is scheduled for completion January 1983, and the Institution continues to seek appropriate operating and equipment purchase resources for the activities to be housed there. These resources appear in Table 7 and in the Special Programs chapter.

In addition, through its trust operations, the Institution will continue to concentrate on ways to develop quality educational products for the visiting public and Associate programs, sustain growth in endowment reserves, supplement important programs such as collections acquisitions, fellowships, tours, selected research investigations, conferences, and symposia of timely importance. Unrestricted trust funds and private donations are planned to cover one-half the construction costs of the Quadrangle.

In a significant way, through the budget process, the Institution has redirected current federal resources to meet high priority needs and has applied unrestricted trust fund income as self-help contributions to maintain the administrative support balance and to strengthen programs of acquisition, research, and education. Such efforts will continue to the best of the Institutions's ability given the pressures at work on the

federal budget to reduce spending while public use of our services remains strong, and given the uncertainty surrounding the continued availability of unrestricted trust income from auxiliary and other activities. Although the present revenues are encouraging, the Institution's management feels only guardedly optimistic about the next five-year projection of such income. As in all business cycles, the public acceptance of the Institution's products or services, for example those performed by the National Associates, is speculative. It is possible that in the next five years the Magazine, which is the most popular of the Associates' activities, may suffer a decline in its success contingent with the business cycle. Similarly, purchases in the Institution's shops, sales of books or records, or the sale of other products issued as services through the Associates' activities may decline. As with any such projections, therefore, it seems imperative that appropriate safeguards should be taken against the assumption that the expansion of these activities will continue in an unbroken progressive curve.

The Institution will continue to pursue the following principal objectives over the next five years.

<u>Objectives</u>	<u>Principal Funding Source(s)</u>
<u>Operations</u>	
1. To open, equip and operate the Museum Support Center and the new Quadrangle facilities, including as an integral part of the Museum Support Center the development of a collections conservation and conservation training program.	Federal Appropriations and Nonappropriated Unrestricted Trust Funds
2. To strengthen museum operations in the documentation and care of the collections through inventories, the future development of automated security and information retrieval systems, and conservation programs. In FY 1983 most major inventories, tailored to the needs of different types of specimens and objects, will be completed, and collections to be relocated to the Museum Support Center will have been fully inventoried to enable immediate retrieval and use.	Federal Appropriations
3. To improve the level of technical assistance and program funds which encourage original research by the Institution's professional staff in	Federal Appropriations and Nonappropriated Unrestricted Trust Funds

science, history, and art, priority is placed on stimulating innovative approaches to research through competition and outside peer evaluation, and through in-residence fellowships for senior and aspiring junior scholars, especially women and minorities.

- | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 4. | To develop contemporary exhibitions and exhibition techniques to communicate to the Institution's audiences recent discoveries, important ideas, and new results of scholarship in science, history, and art. | Federal Appropriations |
| 5. | To enhance the Institution's activities in national and international environmental conservation, research and education with emphasis on temperate and tropical biology, and on the conservation and study of endangered species. | Federal Appropriations |
| 6. | To continue to offer the nation an outstanding magazine, and other quality publications on subjects within the Institution's responsibilities; to utilize the latest technologies and methods to provide radio programs, recordings, and television presentations. | Nonappropriated
Unrestricted Trust Funds |
| 7. | To strengthen the National Collections for research and exhibitions through the acquisition of important objects and specimens. | Federal Appropriations,
Nonappropriated Unrestricted
Trust Funds, and private
donations |
| 8. | To augment administrative, financial, and other support services to meet current and anticipated program needs. Areas of special emphasis include personnel, facilities planning and engineering, security, and library services to meet the total requirements of the Institution; computer and photographic services in connection with improved documentation of the collections; and facility and protection services. Strengthening of equal employment opportunities and activities will also receive increased attention over the planning period. | Federal Appropriations
and Nonappropriated
Unrestricted Trust
Funds |

Facilities

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <p>1. To develop the Quadrangle (the area bounded by the Smithsonian Institution Building, The Freer Gallery of Art, the Arts and Industries Building, and Independence Avenue) to accommodate the Museum of African Art and additional space for the exhibition of Eastern art in the Sackler Gallery.</p> | <p>Federal Appropriations, Nonappropriated Unrestricted Trust Funds, and private donations</p> |
| <p>2. To pursue the development of animal and public facilities at the Zoological Park in Rock Creek Valley, and to improve the research, conservation, and visitor education facilities at the Zoo's Research and Conservation Center at Front Royal, Virginia.</p> | <p>Federal Appropriations and Nonappropriated Unrestricted Trust Funds</p> |
| <p>3. To repair, upgrade, and restore Smithsonian buildings to keep them in safe and functional condition with special emphasis on the provision of fire detection, containment, and suppression systems, access by handicapped persons, building exteriors, and energy conservation.</p> | <p>Federal Appropriations</p> |
| <p>4. To provide new and renovated facilities at the Smithsonian's Washington, D. C. and field locations for purposes of facilitating research and educational programs.</p> | <p>Federal Appropriations</p> |

For the most part, the effects of inflation cannot be incorporated realistically into the Institution's resource forecasts for bureau and program operations. Summary Table 1, however, attempts to show the general levels of resources that would materialize assuming legislated pay changes are forthcoming in the range of 4 to 5 percent per year and assuming federal nonpersonnel purchases occur based on price changes for future years as derived from indices supplied by the Office of Management and Budget. Similar patterns are incorporated for trust projections. By FY 1988, resources from all sources required for various operations would increase from FY 1982 levels of approximately \$253,000,000 to \$416,000,000.¹

1. The Appendix presents a summary of those areas of operations for which inflationary effects have been incorporated into the projections, and converts institutional resource growth into constant FY 1982 dollars.

Exclusive of legislated pay increases, federal salaries and expenses are projected to increase approximately \$75,000,000. Significant additions are forecast for such items as security and protection, utility costs, necessary pay increases, inflation in nonpay areas, equipping and operating the Museum Support Center and the Quadrangle, basic and interpretive research utilizing the collections and scientific and cultural information, improvement to technical and administrative support, and for physical plant operations and maintenance.

Operations supported with nonappropriated trust funds and federal grants and contracts are expected to increase by approximately \$57,000,000. These increases involve primarily the revenue producing activities, including the Magazine and the Smithsonian Press, where production expenses are predicted to increase considerably. Detailed forecasting of federal grant and contract activities is difficult to achieve, but the Institution expects some increasing support for various operations in future years. Finally, expenses associated with operations funded by restricted trust fund resources are expected to remain relatively stable, and these will continue to be accommodated largely by income related to restricted fund investments.

The trust fund forecasts assume the Institution will make measured progress in increasing its capital reserves (endowments), thus approximately \$2,000,000 to \$3,000,000 a year is incorporated into the projections for this purpose. In addition, trust support for fellowship stipends, collections acquisition, research, and other educational activities is projected to be slightly higher in future years if economic conditions permit, and if the Institution's auxiliary and revenue-producing activities continue to perform in a satisfactory fashion. In addition, provision is made for an amount of \$3,200,000 over FY 1984-85 towards construction of the Quadrangle. This amount represents the balance of the approximate \$9,000,000 to be used for this purpose as previously approved by the Regents. Federal construction appropriations of \$36,500,000, or one-half of the total estimated construction costs, have been received for FY 1983. Emphasis is being given to raising the balance of the funds from private donors to finish the project during the planning period.

No major additions to physical facilities are expected over the next five years other than the Quadrangle and Museum Support Center. However, consideration is being given to accelerating the parking facilities and the aquatic habitat exhibit needed at Rock Creek for Zoological Park visitors, and to establishing a new permanent headquarters of modest size and cost for the Anacostia Neighborhood Museum. These projects are now under preliminary management review, along with a combined laboratory and office building at the Chesapeake Bay Center. Improvements and contemplated changes to other facilities include the installation of fire detection and suppression systems, the correction of other hazardous conditions and attention to disabled persons access, the provision of renovated and new facilities (especially at the Institution's field activities such as Mt. Hopkins, Arizona, and the Tropical Research Institute) and a continuing program of repairs and maintenance to all Smithsonian buildings.

Notes on Financial Projections

The tables were designed to show trends in the Institution's future year resource patterns, and to reflect the changes and growth contained in the narrative portions of this report. The FY 1982 figures are end-of-year figures for expenditures and income. FY 1983 figures are those approved by Congress, Board of Regents' authorization to expend the FY 1983 appropriation, and Board of Regents' approval of the nonappropriated trust fund portion of the FY 1983 budget.

The FY 1984 federal figures are those contained in the President's budget submitted to Congress in January 1983. Projections for years FY 1983-88 were derived from basic materials prepared by the organizations and bureaus of the Institution and then reviewed by the appropriate members of the Secretary's Executive Committee. Beyond FY 1984, the trends represent management's best estimate of federal and trust resources that will be needed to meet program and operating aspirations of the Institution.

Trust fund projections, as mentioned earlier, are particularly vulnerable to fluctuations in the nation's economic climate. They are presented to help explain the expected use of these funds. Trust funds are composed of restricted and unrestricted funds. Unrestricted trust funds (general and special purpose) originate from a variety of sources including income from endowments and current fund investments, parking and food service concessions, sales of Smithsonian products based on designs and objects in the collections, the Resident and National Associate Programs (including Smithsonian magazine), a publications program, and the museum shops. In addition, certain bureaus have their own income-producing activities, such as the Theater and Spacearium operations of the Air and Space Museum. Restricted trust funds include gifts, grants, endowment and other income designated for specific projects and purposes by the donor. The Freer fund is the largest example in this category, being strictly controlled under the terms of the original bequest for the sole use of the Gallery.

There are three major purposes to which the unrestricted trust funds are applied. First, the expenses of the Associate Programs and revenue-producing activities, such as the Smithsonian magazine and the museum shops, are funded from the earned income of these activities. Second, central management and administrative service units of the Institution, such as legal counsel, accounting, personnel, supply and others, receive trust fund allotments funded almost entirely from the overhead recovery on grants and contracts administered by the Smithsonian and from administrative fees charged to trust-funded activities. General operating funds are also provided to various units for research and other specific purposes. Third, a variety of allocations for important institutional and bureau needs has been made with the approval of the Board of Regents, such as the Collections Acquisition, Scholarly Studies, and Education Programs; the Institution's Fellowship programs; and the reserves for the Quadrangle development.

After the three major categories of operating expense financed with unrestricted trust funds are met, the remaining unrestricted income is designated for three purposes. Funds are transferred to the museums and galleries in recognition of their assistance in the planning and carrying out of museum shop, product development and concession programs. These funds are used for the general operations of the recipient bureaus. A second designation is for improvements to the physical plant or land acquisitions. Finally, funds permitting, the Institution makes an annual transfer to its endowment for the purpose of providing income for rising costs in future years.

The other source of nonappropriated funding, federal grants and contracts, is made available to the Smithsonian by governmental agencies and departments to support specific types of research, educational or other projects which the Smithsonian can undertake as a result of its expertise or its ability to respond quickly to certain kinds of needs.

Tables 1 and 2. Table 1 contains general levels of dollar resources (or revenues) from various sources which the Institution projects will be necessary for the conduct of its operations. In a summary fashion, it incorporates estimates for inflation and pay increases associated with federal and trust operations of the Institution. Table 2 projects expenses by functional area of operation (Science, History and Art, etc.) along with the application of trust funds to such items as plant improvements; endowments; and special activities such as the Collections Acquisition, Scholarly Studies, and Education Programs.

Tables 3 through 10. These contain detailed expense projections for the Institution's museums, galleries, and laboratories. For ease of presentation, expenses associated with the various administrative, financial, and support organizations of the Institution are grouped into three categories in Table 10: (1) Central Management Offices, (2) Specialized Administrative and Technical Offices, and (3) Facilities Offices.

Tables 11 and 12. All major construction projects are included that are under way or being planned. For some future projects, detailed planning and estimating remain to be done (e.g., new quarters for the Anacostia Neighborhood Museum and base camp facilities at Mt. Hopkins for the Observatory) and the amounts as well as the possible sources of funding have not been fully determined.

Table 13. Projections associated with equipping and operating the Quadrangle are consolidated in Table 13 to provide a summary of resources needed for this project through FY 1988. These estimates are under continuing review and will be revised periodically.

Table 14. Presents operating funds for FY 1975, FY 1982, and FY 1988 in actual and constant 1982 dollars.

SMITHSONIAN INSTITUTION
SOURCE OF OPERATING FUNDS
FY 1982 PROJECTED THROUGH FY 1988

(\$000)

SOURCE OF OPERATING FUNDS		FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987	FY 1988
Federal Salaries and Expenses								
Plus cumulative effect of legislated pay raises		131,170	146,756	154,354	172,253	191,348	195,467	206,370
Subtotal		131,170	146,756	158,654	182,253	208,248	219,667	237,570
Nonappropriated Trust Funds								
Unrestricted General								
Investments		2,921	2,800	2,850	2,925	3,000	3,100	3,200
Gifts		18	50	50	50	50	50	50
Auxiliary Activities		94,425	100,343	107,470	118,050	128,265	135,632	144,244
Miscellaneous		83	50	50	50	50	50	50
Subtotal		97,447	103,243	110,420	121,075	131,365	138,832	147,544
Unrestricted Special Purpose								
Investments		719	585	607	615	620	625	630
Gifts		305	152	180	180	180	180	180
Bureau Activities		2,925	3,240	3,765	3,825	4,000	4,125	4,250
Miscellaneous		762	726	764	770	770	770	770
Subtotal		4,711	4,703	5,316	5,390	5,570	5,700	5,830
Restricted								
Investments		2,886	2,816	2,827	2,850	2,900	2,950	3,000
Gifts, Grants and Contracts		3,154	4,141	4,091	3,700	3,775	3,825	3,900
Miscellaneous		781	777	792	800	800	800	800
Subtotal		6,821	7,734	7,710	7,350	7,475	7,575	7,700
Federal Grants and Contracts		13,217	13,032	14,391	14,776	15,850	17,099	17,789
Gross Income		253,366	275,468	296,491	330,844	368,508	388,873	416,433
Less Expenses of Auxiliary and Bureau Activities		(88,596)	(93,424)	(100,930)	(110,438)	(120,734)	(127,358)	(135,140)
Net Funds Provided		164,770	182,044	195,561	220,406	247,774	261,515	281,293

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 PROJECTED THROUGH FY 1988

((\$000)

Table 2 (1)

APPLICATION OF OPERATING FUNDS	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987	FY 1988
<u>Science</u>							
.Federal Salaries and Expenses	44,652	48,064	50,892	54,121	55,992	57,483	58,812
.Unrestricted General							
-Program and Administrative*	342	226	234	238	245	254	262
-Auxiliary Activities	--	--	--	--	--	--	--
.Unrestricted Special Purpose							
-Bureau Activities	1,536	1,713	1,825	1,889	1,948	2,009	2,072
-All Other	2,050	1,567	1,621	1,651	1,698	1,765	1,835
.Restricted	2,458	2,555	2,758	2,942	2,801	2,862	2,909
.Federal Grants and Contracts	12,848	12,847	14,231	14,651	15,725	16,974	17,664
Subtotal	63,886	66,972	71,561	75,492	78,409	81,347	83,554
<u>History and Art</u>							
.Federal Salaries and Expenses	22,080	23,665	25,178	27,391	34,425	32,553	33,674
.Unrestricted General							
-Program and Administrative	741	703	697	700	682	645	627
-Auxiliary Activities	8,265	639	474	500	500	500	500
.Unrestricted Special Purpose							
-Bureau Activities	550	569	863	824	879	915	951
-All Other	1,781	704	692	733	773	843	884
.Restricted	3,301	4,221	3,614	3,636	3,588	3,543	3,625
.Federal Grants and Contracts	117	85	60	25	25	25	25
Subtotal	36,835	30,586	31,578	33,809	40,872	39,024	40,286
<u>Public Service</u>							
.Federal Salaries and Expenses	1,211	1,635	1,596	1,596	1,596	1,596	1,596
.Unrestricted General							
-Program and Administrative	738	777	849	891	935	981	1,030
-Auxiliary Activities	6,640	11,479	11,975	12,595	12,718	12,880	13,129
.Unrestricted Special Purpose							
-Bureau Activities	20	60	61	61	62	62	63
-All Other	141	100	50	--	--	--	--
.Restricted	219	--	--	--	--	--	--
.Federal Grants and Contracts	--	--	--	--	--	--	--
Subtotal	8,969	14,051	14,531	15,143	15,311	15,519	15,818

*Net of SAO Overhead Recovery

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 PROJECTED THROUGH FY 1988

(\$000)

Table 2 (2)

APPLICATION OF OPERATING FUNDS	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987	FY 1988
<u>Museum Programs</u>							
.Federal Salaries and Expenses	7,788	8,481	8,575	10,785	11,256	11,759	12,870
.Unrestricted General	288	274	304	316	332	348	365
-Program and Administrative	1,167	1,164	1,178	1,198	1,267	1,397	1,447
-Auxiliary Activities							
.Unrestricted Special Purpose							
-Bureau Activities	55	52	55	66	71	76	81
-All Other	55	2	5	2	2	3	3
.Restricted	277	954	740	309	310	311	312
.Federal Grants and Contracts	131	--	--	--	--	--	--
Subtotal	9,761	10,927	10,857	12,676	13,238	13,894	15,078
<u>Special Programs</u>							
.Federal Salaries and Expenses	7,637	11,290	12,213	12,378	12,033	11,828	12,093
.Unrestricted General	680	618	621	628	612	616	600
-Program and Administrative	--	--	--	--	--	--	--
-Auxiliary Activities							
.Unrestricted Special Purpose							
-Bureau Activities	5	13	9	11	11	11	11
-All Other	728	3,782	3,633	3,729	4,079	4,189	4,589
.Restricted	149	114	149	125	127	140	142
.Federal Grants and Contracts	339	100	100	100	100	100	100
Subtotal	9,538	15,917	16,725	16,971	16,962	16,884	17,535
<u>Associates Programs</u>							
.Federal Salaries and Expenses	--	--	--	--	--	--	--
.Unrestricted General	499	681	384	403	423	444	466
-Program and Administrative	48,668	54,813	59,448	64,148	69,495	74,109	79,851
-Auxiliary Activities							
.Unrestricted Special Purpose							
-Bureau Activities	15	10	11	11	12	12	12
-All Other	9	2	2	2	2	2	2
.Restricted	35	14	--	--	--	--	--
.Federal Grants and Contracts	--	--	--	--	--	--	--
Subtotal	49,226	55,520	59,845	64,564	69,932	74,567	80,331

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 PROJECTED THROUGH FY 1988

(\$000)

Table 2 (3)

APPLICATION OF OPERATING FUNDS	FY 1982	FY 1983	FY 1984	FY 1985	FY 1985	FY 1987	FY 1988
<u>Business Management</u>							
.Federal Salaries and Expenses	--	--	--	--	--	--	--
.Unrestricted General							
-Program and Administrative							
-Auxiliary Activities	21,579	22,825	24,921	29,019	33,650	35,260	36,890
.Unrestricted Special Purpose							
-Bureau Activities	--	--	--	--	--	--	--
-All Other	--	--	--	--	--	--	--
.Restricted	--	--	--	--	--	--	--
.Federal Grants and Contracts							
Subtotal	21,579	22,825	24,921	29,019	33,650	35,260	36,890
<u>Administrative, Financial and Technical Services</u>							
.Federal Salaries and Expenses							
.Unrestricted General	9,810	10,459	11,629	11,799	12,195	12,425	12,720
-Program and Administrative*							
-Auxiliary Activities	175	737	968	1,084	1,494	2,001	2,403
.Unrestricted Special Purpose	94	86	109	115	120	126	132
-Bureau Activities	1	--	--	--	--	--	--
-All Other	90	98	101	102	103	108	112
.Restricted	130	124	70	74	68	68	68
.Federal Grants and Contracts	--	--	--	--	--	--	--
Subtotal	10,300	11,504	12,877	13,174	13,980	14,728	15,435
<u>Facilities Services</u>							
.Federal Salaries and Expenses							
.Unrestricted General	38,053	43,162	44,271	50,783	56,251	57,123	59,705
-Program and Administrative							
-Auxiliary Activities	1,218	1,088	1,207	1,266	1,329	1,395	1,464
.Unrestricted Special Purpose							
-Bureau Activities	--	--	--	--	--	--	--
-All Other	1	1	1	1	1	1	1
-Bureau Activities	54	9	10	11	11	11	11
.Restricted	2	1	2	2	2	2	2
.Federal Grants and Contracts	--	--	--	--	--	--	--
Subtotal	39,328	44,261	45,491	52,063	57,594	58,532	61,183
*Net of SI Overhead Recovery							13

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 PROJECTED THROUGH FY 1988

(\$000)

Table 2 (4)

APPLICATION OF OPERATING FUNDS	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1988	FY 1988
<u>Inflation and Pay Requirements</u>							
.Federal Salaries and Expenses							
-Necessary Pay	--	--	--	1,500	3,100	4,700	6,400
-Inflation	--	--	--	1,900	4,500	6,000	8,500
-Supplemental	--	--	4,300	10,000	16,900	24,200	31,200
Subtotal	--	--	4,300	13,400	24,500	34,900	46,100
<u>Institutional Total</u>							
.Federal Salaries and Expenses	131,231	146,756	158,654	182,253	208,248	219,667	237,570
.Unrestricted General							
-Program and Administrative	4,681	5,104	5,264	5,526	6,052	6,684	7,217
-Auxiliary Activities	86,413	91,006	98,105	107,575	117,750	124,272	131,949
.Unrestricted Special Purpose							
-Bureau Activities	2,183	2,418	2,825	2,863	2,984	3,086	3,191
-All Other	4,908	6,264	6,114	6,230	6,668	6,921	7,436
.Restricted	6,571	7,983	7,333	7,088	6,896	6,926	7,058
.Federal Grants and Contracts	13,435	13,032	14,391	14,776	15,850	17,099	17,789
Gross Funds Applied	249,422	272,563	292,686	326,311	364,448	384,655	412,210
Less Expenses of Auxiliary and Bureau Activities	(88,596)	(93,424)	(100,930)	(110,438)	(120,734)	(127,358)	(135,140)
Net Funds Applied Before Transfers							
.Federal Salaries and Expenses	131,231	146,756	158,654	182,253	208,248	219,667	237,570
.Unrestricted General	4,681	5,104	5,264	5,526	6,052	6,684	7,217
.Unrestricted Special Purpose	4,908	6,264	6,114	6,230	6,668	6,921	7,436
.Restricted	6,571	7,983	7,333	7,088	6,896	6,926	7,058
.Federal Grants and Contracts	13,435	13,032	14,391	14,776	15,850	17,099	17,789
Net Before Transfers	160,826	179,139	191,756	215,873	243,714	257,297	277,070

SMITHSONIAN INSTITUTION

APPLICATION OF OPERATING FUNDS

FY 1982 PROJECTED THROUGH FY 1988

(\$000)

Table 2 (5)

APPLICATION OF OPERATING FUNDS	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987	FY 1988
Transfers: Out/(In)							
.Federal Salaries and Expenses*	124	--	--	--	--	--	--
.Current Funds Transfers (Internal)							
-Unrestricted General	3,375	3,723	3,953	4,102	4,537	4,684	5,123
-Unrestricted Special Purpose	(3,375)	(3,723)	(3,953)	(4,102)	(4,537)	(4,684)	(5,123)
.Current Funds to Plant Improvement							
-Unrestricted General	1,000	1,500	1,200	2,000	--	--	--
-Unrestricted Special Purpose	64	(225)	25	--	--	--	--
.Current Funds to Endowment							
-Unrestricted General	2,021	2,021	2,021	2,021	3,021	3,021	3,021
-Unrestricted Special Purpose	238	--	--	--	--	--	--
-Restricted	318	120	120	120	120	120	120
Total Transfers	3,765	3,416	3,366	4,141	3,141	3,141	3,141
Net Changes in Fund Balance:							
Increase (Decrease)	(185)	--	--	--	--	--	--
.Federal Salaries and Expenses**	5	(111)	(123)	(149)	5	171	234
.Unrestricted General	404	(31)	305	399	455	377	326
.Unrestricted Special Purpose	173	(369)	257	142	459	529	522
.Restricted	(218)	--	--	--	--	--	--
.Federal Grants and Contracts							
Subtotal	179	(511)	439	392	919	1,077	1,082
Net Funds Applied							
.Federal Salaries and Expenses							
-Unrestricted General	131,170	146,756	158,654	182,253	208,248	219,667	237,570
-Unrestricted Special Purpose	11,082	12,237	12,315	13,500	13,615	14,560	15,595
-Restricted	2,239	2,285	2,491	2,527	2,586	2,614	2,639
.Federal Grants and Contracts	7,062	7,734	7,710	7,350	7,475	7,575	7,700
Net Funds Applied	13,217	13,032	14,391	14,776	15,850	17,099	17,789
Net Funds Applied	164,770	182,044	195,561	220,406	247,774	261,515	281,293

*Unobligated funds returned to Treasury.

**Balance of funds for Franklin Delano Roosevelt celebration available through FY 1982.

SCIENCE

The science programs of the Institution consist of the Museum of Natural History/Museum of Man, Astrophysical Observatory, Air and Space Museum, Tropical Research Institute, Radiation Biology Laboratory, Chesapeake Bay Center for Environmental Studies, and the Zoological Park. In addition, some of the supporting units that report to the Assistant Secretary for Science include the Office of Biological Conservation and the Office of Fellowships and Grants. The latter office, contained within the Special Programs chapter to provide consistency with the FY 1984 budget submission, encompasses the activities of the Institution's Special Foreign Currency Program.

The major goal for the science programs over the planning period is to maintain the high quality of research in the scientific disciplines currently represented. The Smithsonian is a unique national resource in the basic sciences and provides critical continuity to various long-term research efforts that are not provided by universities or other federal agencies. The research activity of Smithsonian scholars is fundamental to the Institution's ability to meet its public obligations. The results of research are used as the basis for the development of exhibitions for the public as well as the preparation of public education material. Adequate support for the scientific research efforts of the Institution is needed if other elements of the Smithsonian's overall program are to thrive. For example, the value of the Institution's vast scientific collections must be weighed in terms of the information derived from them for research purposes, in addition to being a source of material for exhibitions. The ability to maintain the Smithsonian's preeminent role in various areas of science and to provide enhancement for selected new starts is incorporated into the planning period. The Institution's scientists are in demand for their expertise, and are looked upon by the international community for leadership in a number of fields. The scientific enterprise of the U.S. is largely dependent on fundamental knowledge gathered by organizations such as the Smithsonian to achieve major breakthroughs in science and technology.

During the planning period, in addition to basic research, efforts will be made to increase in a selective way support for publications, fabrication and operation of large scientific instruments, collections management, and education. Continuous interchange of information among bureau directors, office heads, and the Assistant Secretary for Science provides the framework for planning and coordination of the science activities. In general, the bureaus will continue to have considerable influence and autonomy in shaping institutional programs.

Current Resources and Support

In FY 1982, total resources available to Science amounted to approximately \$66,400,000 and 1,599 full-time employees. Total funding consisted of approximately 67 percent federal appropriations, 19 percent federal grants and contracts, and 14 percent nonappropriated unrestricted and restricted trust funds. A breakdown follows (before application of overhead recovery):

<u>Source of Funds</u>	<u>FY 1982</u>	
	<u>Full-Time Employment</u>	<u>Funds (\$000s)</u>
Federal Salaries & Expenses	1,306	\$44,652
Unrestricted trust	101	6,415
Restricted trust	10	2,458
Federal Grants & Contracts	<u>182</u>	<u>12,848</u>
Total	1,599	\$66,373

The sources of support vary markedly from organization to organization. For example, the Marine Station at Link Port, Fort Pierce, Florida, which is administered by the Museum of Natural History, operates solely with restricted trust funds, while the Astrophysical Observatory, because of its unique national and international position as a research leader, has better than two-thirds of its dollar and personnel resources associated with federal grants and contracts. The Tropical Research Institute and the Zoological Park, on the other hand, rely extensively on federal appropriations for maintenance of programs.

As is the case with other museums and galleries of the Institution, the Museum of Natural History and the Air and Space Museum conduct their basic exhibit, research, collections, and building services activities primarily with federal appropriations, but at the same time enjoy measured support from restricted or unrestricted trust sources, and from federal grant and contract work based upon their ability to obtain these funds.

Future Year Prospectus

In FY 1988, trust fund expenses (restricted and unrestricted) may increase somewhat from their present level of \$8,900,000. An increase in federal grant and contract work during the period is uncertain due to general budget reductions. Although there is continuing interest on the part of the National Aeronautics and Space Administration in the capabilities of the Astrophysical Observatory to conduct selected research experiments related to the nation's space shuttle and satellite tracking programs, it is unclear as to what level NASA's space science programs will be funded in the future. Consequently, it is difficult at this time

to predict with certainty the level of grant and contract support SAO is likely to receive. Increased federal appropriations of about \$14,200,000 will be required to fund programs and to maintain the quality of the Smithsonian's science operations.

Museum of Natural History/Museum of Man. The Museum of Natural History/Museum of Man is recognized as a major international center for collections-based research and exhibits. Over the last fifteen years the Museum's growth has not been evenly balanced among its major functions of research, collection management, and exhibits. In the last several years, significant strides have been made to restore vitality to the exhibits program. A comprehensive inventory program has been initiated, and some support has been received in selected research areas. Over the planning period, increased attention will be placed on bringing the collection management program into better balance with the Museum's other major functions. Following the move of selected collections to the Museum Support Center, greater attention and resources will need to be applied to the remedial needs of those collections remaining in the Museum.

In the research area, the primary focus will continue to remain on individual research projects, which is proper for a world center collection-based research organization. Greater attention also will be placed during this planning period on cluster-type research programs. These programs will be designed to encompass a number of scientific disciplines in an integrated approach to studies of the environment, productivity, and adaptation. While resources for these programs will generally be solicited from outside sources, some increases will be sought to augment selected new efforts. In addition, in FY 1984 and future years selected increases will be sought to support the publishing efforts of the permanent staff and to increase the existing base for equipment necessary for the conduct of laboratory and field research.

In the exhibits program a major milestone was reached with the opening of the Dinosaur Hall in December 1981. During the planning period, work will come to completion on two other paleontology halls. Work has already begun on a new complex of halls treating biological diversity, to be located in the current Whale Hall and adjacent halls. An active schedule of shows is planned for the Thomas M. Evans Special Exhibits Gallery (the Institution's temporary exhibit gallery located in the Museum), and work will be continued on maintenance and correction of deficiencies in the Museum's present halls and galleries.

The inventory of the Museum's holdings continues on schedule, with completion expected in FY 1983. When finished, the inventory file will contain over 2,500,000 records, many of them covering batches of specimens. The information will be of immediate practical importance to the Museum as the move of collections to the Museum Support Center gets under way in 1983. It is essential that the inventory files be maintained on a current basis both at the Museum and at the Museum Support Center, and this will require continuation of funding for inventory support.

The Subarctic volume, the fourth in the Handbook of North American Indians series, was published early in 1982, and publication of the Southwest II volume is scheduled for the spring of 1983. First editing, artifact and photo selections will be completed for the Arctic volume, the next in the series, in the spring of 1983. A new managing editor for the Handbook was recently hired and this will help to accelerate production.

The Museum of Man exists as a programmatic concept within the facilities and administrative framework of the Museum of Natural History. It has no resources, building, or activities of its own, except as reflected in past years in the operations of the Center for the Study of Man. The significant Congressional reduction in the Center's FY 1983 base has created a need to review operations over the next few months relative to continuing filming, archival, immigration and other studies, and any associated staff work. The concept of a Museum of Man continues to have basic appeal and the Institution will examine ways to further its programmatic development.

In FY 1982, the Museum of Natural History undertook the management of the Smithsonian Marine Station at Link Port, Florida (formerly called the Fort Pierce Bureau), as an integral part of its marine research program. The name change was made to reflect the fact that the facility at Fort Pierce is not a bureau in and of itself with a program of its own, but rather a locus for the conduct of research and available to scientists from several of the Institution's bureaus. Over the planning period, a series of cooperative efforts with other bureaus and outside scholars will be developed to explore further the life history and systematics of various kinds of organisms from the Indian River and adjacent Atlantic Ocean. This activity is funded exclusively with trust funds, and resources are expected to remain relatively stable over the planning period.

Astrophysical Observatory. Over the next five years, the Astrophysical Observatory (SAO) will concentrate available new resources on two major questions of astronomy: (1) the origin and evolution of galaxies, and (2) the origin and evolution of stars like the Sun, including the Sun itself. During the 1980's, these two areas are particularly ripe for investigation. The study of galaxies should bear significant results because of the increasing availability and reliability of large and sensitive instruments, such as the Observatory's Multiple Mirror Telescope (MMT)² located at Mt. Hopkins in Arizona, and X-Ray Imaging Detectors. The study of the Sun and similar stars is important because of the necessity to understand their close relationships to planetary sciences, earth sciences, and biological sciences. During the planning period, an effort will be made to increase selectively the research staff to take advantage of these opportunities. Particular emphasis will be given to

2. Renamed the Fred L. Whipple Observatory on September 14, 1981.

X-ray astronomy in an effort to capitalize on the wealth of information provided by the Einstein Satellite (the orbiting HEAO-2 X-ray telescope) which stopped operating late in April 1981. In addition, a strengthening of the solar physics program is planned through phasing of additional resources into the Langley-Abbot program.

The MMT is almost fully operational, being used about 80 percent or more for scientific observations, and should be fully utilized by the end of FY 1983. Its performance characteristics exceed the original design specifications established back in 1972. The site on which the MMT is located is an excellent site in terms of astronomical seeing quality. The combination of excellent telescope performance and site characteristics results in the MMT's being the best infrared telescope in the world. Improvements in the optics are needed, however, in order to be able to take full advantage of the excellent astronomical seeing qualities of the site. These improvements are to be initiated during the current planning period.

X-ray, infrared, and visible light detectors are critical components to SAO's research and, as such, there is a need to establish an ongoing program for the development and testing of detectors to be used in instruments for making ground-based and space-borne observations. In addition, SAO's image processing facility will have to be expanded to provide for the timely processing of the large quantities of X-ray, optical and infrared data obtained from instruments using state-of-the-art detectors, as well as data obtained through very long baseline radioastronomy.

During the planning period, improvements are to be made in the 60-inch telescope located at the Whipple Observatory on Mount Hopkins. These improvements include refiguring of the mirror, improving the tracking and pointing system and installing an autoguider system. These improvements should result in higher quality data and allow the telescope to be used for taking of photographs of astronomical objects. A remote observing program is also to be implemented during the current planning period. This will have the advantages of (a) reducing travel costs, (b) allowing scientists to spend more time on the analysis and interpretation of data, (c) providing for the timely and possible near-real time processing of data, and (d) making more effective use of the telescope by scheduling observations on the basis of compatibility with one another (i.e., objects to be observed, instruments to be used, wavelength in which observations are to be made, etc.).

Facilities development and related operational needs, primarily for the Whipple Observatory, will be sought over this period. Major improvements of the road from the base of the mountain to the summit will be completed in FY 1983. A standby emergency power system to avoid full shutdown of the facility will need to be sought over the planning period. It also will be important to obtain the necessary resources for passenger vehicles and assorted road maintenance equipment. Plans are also developing for a major improvement to base camp facilities at the Whipple Observatory, and authorization will be sought to purchase the existing leased land.

Tropical Research Institute. The Tropical Research Institute (STRI), located in the Republic of Panama, is the nation's leading basic tropical research center. Over the next five-year period, the Institute will continue to be a logistic center for research into fundamental tropical biology by its own permanent staff of scientists, and by members of the international scientific community involved in tropical research on terrestrial and marine subjects. Present facilities of the Institute include a new, advanced sea water system at STRI's Naos Island Pacific Marine Laboratory. This system, opened in FY 1981, permits a greater variety of experimental work on marine organisms. It will be supplemented by a new addition to the Laboratory space by the end of FY 1983. This is expected to provide facilities for expanded marine studies in the Bay of Panama and in connection with the proposed Sea Level Canal. Another new facility being completed in early 1983 is the STRI Library Building which will enhance STRI's already world-famous library of tropical science. STRI expects eventually to complete the Tivoli complex by building new laboratories for terrestrial studies.

In addition to basic research, the Institute is also an innovative center promoting conservation efforts in the tropics through educational programs. Its conservation functions include the custodianship of the Barro Colorado Nature Monument (BCNM), granted to it under the terms of the Panama Canal Treaty and a hemispheric convention. The BCNM includes Barro Colorado Island (3,700 acres) and the encircling mainland areas (8,600 acres). As the only U.S. organization devoted exclusively to research, conservation, and education in the tropics, the Institute has been experiencing pressure on its facilities from the increasing numbers of requests for accommodations from the U.S., Panama, and throughout the world. The expansion of land holdings in the Nature Monument has provided the Institute with an opportunity to study ways to accommodate these increasing demands, including a possible future research/visitor complex on Frijoles Island (an area of the BCNM). The new areas have stimulated exploration and new kinds of research. STRI is developing a program with several Central American and international organizations to be implemented in these areas, whereby results of basic studies can be applied to the problem of using tropical forests for the benefit of man in a nondestructive way. Recently a major five-year grant exceeding \$1,000,000 was received to begin this project.

Starting in FY 1983, three facilities management goals will be nearing realization: a general improvement and upgrading of existing facilities, the consolidation of some facilities to maximize the effectiveness of the ongoing research programs, and the development of site analyses and feasibility studies for a future master plan of facilities development. In addition to a possible complex on Frijoles Island, facilities improvements under consideration include a Barro Colorado Island dormitory/kitchen-dining room complex, laboratories and a conference center at Tivoli as part of the phased development of this site, and a mainland dormitory to provide ready accessibility to the STRI research facility. General repairs and

improvements at the Naos, Galeta and Ancon facilities will continue to be needed. Further information regarding repair, improvement, and facilities needs is contained in the Facilities chapter of this document.

In order to continue to provide the necessary support to ongoing research and facilities operations, it will be necessary to seek replacement funds for major equipment, supplies and materials, and contractual services. The projections include some resources to deal with administrative requirements related to the staged implementation of the Panama Canal Treaties and the custodianship of the BCNM. On March 31, 1982 transition to full Panamanian jurisdiction in the Canal area was completed. For STRI this means adjusting operating procedures. STRI needs to be able to handle its own accounting, personnel, travel, procurement, and other services in order to fill its responsibilities in these areas and its scientific mission.

The tropics are a rich source of ideas of great importance to the future development of science. Tropical areas abound with spectacular and revealing examples of adaptive specialization among animals of different species, between animals and plants, and among both plants and animals and their physical environment. These relationships need to be better understood, and STRI provides an excellent location for studying the diversity of tropical life. Understanding the complexity of relationships among tropical organisms may be the key to understanding ecosystems anywhere, their fragility, and their stability.

In future years, the Institute will try to add about seven new research staff to reach its ideal professional staff size of about 25 scientists. The seven would include scientists to strengthen the work in ethology, ecology, human ecology and evolutionary studies, freshwater biology, physiology, marine sciences, and vertebrate ecology studies. Along with staff growth, the Institute will need additional support funds for travel, equipment, library, publication, and educational materials.

Radiation Biology Laboratory. The Radiation Biology Laboratory during the planning period will continue to study solar radiation and its influence on plants and other living organisms, emphasizing research in regulatory biology and environmental biology. No new major programs are planned through the period; however, improved data acquisition systems will be required to improve the speed, precision and reliability of data required for plant growth experiments conducted under rigidly controlled conditions. In addition, temperature monitoring and control systems are needed for the environmental areas. The growth facilities require continuous 24-hour operation. These monitors will alert staff outside of regular duty hours to failures in the system so that corrective action can be taken to prevent costly damage to equipment and loss of long-term experiments.

The effects of varying spectral quality and ultraviolet radiation on plants are not definitely known, but this information is of significant scientific interest. As part of its environmental biology program, the

Laboratory has developed an ultraviolet scanning radiometer that has improved the accuracy of taking various ultraviolet measurements. In addition, Laboratory-developed equipment is being used at the Tropical Research Institute to measure spectral quality of solar energy transmitted through the tropical forest canopy on Barro Colorado Island. Similar measurements are being taken at the Institution's Chesapeake Bay Center to investigate the transmission of biologically effective solar radiation in the Rhode River estuary. Research into these areas reflects the Institution's continuing interest in the influence of spectral quality of solar radiation on growth and development. Understanding the rhythms and responses of plants to sunlight, especially under environmentally stressed situations, will be of increasing importance in future years.

The Laboratory studies the mechanisms by which light regulates enzyme activity, alters the read out of genetic information, and interacts with membrane systems. Detailed molecular descriptions of these processes are being pursued. For example, the size and composition of accessory pigment complexes (phycobilisomes) in a blue-green algae have been determined. For algae grown in red light the phycobilisomes are smaller (33 nanometer diameter) than those grown in green light (38 nanometer diameter). In addition, the pigment composition has been altered to enable the algal cells to absorb the maximum amount of light available. Knowledge of these processes may lead to future reconstitution from components in the test tube of sunlight energy-harvesting membrane systems.

The Institution has initiated a study this past year to determine the feasibility of relocating the Laboratory to Smithsonian-owned property at the Chesapeake Bay Center for Environmental Studies. This study is examining the feasibility and desirability of program integration between the two bureaus. In addition, the Institution will explore the feasibility of co-locating the Laboratory at a suitable university site. The results of this study are currently being analyzed and a decision will be reached in 1983. The Laboratory is currently housed in leased quarters in Rockville, Maryland, and the lease (including available options) expires in 1990. Relocation to a nonleased site is the preferred solution in order to provide, over the long run, quality research facilities including a glass house and controlled laboratory space for experimenting with plant growth. The Laboratory has not had adequate facilities for this purpose for the last twelve years. Design specifications are being completed by the General Services Administration for renovation of space to provide a limited capacity glass house at roof level of the present building. The Laboratory is now using a small greenhouse facility on loan from the National Naval Medical Center in Bethesda, Maryland. Over the years, however, the research programs have been hampered by the lack of a fully equipped scientific facility. Correcting that situation and providing a permanent relocation are long-term objectives.

Air and Space Museum. Over the last four years, the Air and Space Museum has succeeded in its goal of bringing its education, research and exhibition programs into balance. As vacancies occurred, these positions

were filled with highly qualified persons who have been able to take advantage of the unique archival and research material available. Considerable resources and attention continue to be paid to exhibitions and other services for the visiting public (visitations exceed 52,00,000 since the new building opened in 1976). It is expected that over the planning period this balance will be sustained with selected new starts bringing added vitality to the overall program.

The research program combines a mixture of basic scientific research with historical scholarship in the fields of aeronautics, space sciences and technology. The Center for Earth and Planetary Studies has expanded its efforts in arid land remote sensing, comparative planetology, lunar geology and photo imaging. The Department of Space Sciences and Exploration has now been fully staffed and is embarking on several long-term studies including documenting the Space Telescope. In the Aeronautics Department, the foundation has been laid for a definitive work on aviation history filling a long-perceived void in this area of scholarship. In FY 1982, a number of significant symposia were held, including a 25th anniversary look at the space age. A number of significant publications came out in FY 1982 including: The Bleriot XI: Story of a Classic Aircraft; The Emergence of the Cabin Monoplane in the U.S.; Red Phoenix: The Rise of Soviet Air Power, 1941-1945; Bringing Aerodynamics to America; The History of Modern Astronomy and Astrophysics, and the Rocket Societies. Also in preparation are books on ballooning, women in aviation, and flying wings. In FY 1984, funds are being sought to enhance the present modest base supporting the publication program.

The exhibition program continued its high level of success in FY 1982. A number of major exhibits were completed, including: Jacqueline Cochran: World Record Holder, Black Wings: The American Black in Aviation, 25 Years of Space Exploration, and Aerial Aircraft Carriers. Significant progress is also being made on two new gallery exhibits, Stars and the Golden Age of Flight, scheduled to open in 1983 and 1984, respectively. A new IMAX film entitled "Flyers" opened as did a new Spacearium show entitled "Probe".

The collections management activities of the Museum will continue to be emphasized during the planning period. Considerable progress has been made with the collections inventory in FY 1982 and it is now expected to be completed in 1983. All accessioned artifacts have been inventoried and reconciliation of previously nonaccessioned and misidentified items is well under way. More than 3,500 cubic feet of photographs, drawings, reports, and related material have been sorted and reboxed for storage in a new archives storage facility at the Garber Facility. A prototype system for placing photographs on videodisc has proven successful, and further efforts will be made with this unique system.

The Education Services Division continues to develop programs to convey information to the visiting public. In FY 1982, special emphasis was placed on handicapped visitors. Also, a major program to attract minority students to the Museum was undertaken. Monitoring of the educational content of exhibits and public material continues as a mainstay effort.

Building maintenance and repair will continue to be emphasized during the planning period. The welcome burden of large attendance has strained existing resources. Additional resources will be sought for these needs over the next five years, as well as for the Museum's activities at its restoration and preservation facility at Suitland, Maryland.

Chesapeake Bay Center for Environmental Studies. The Chesapeake Bay Center is a 2,600-acre natural area established to conduct research on how man's activities affect ecological systems, particularly where alterations in land use are involved. In recognition of the Center's location and excellent site characteristics for this research, it has been proposed for designation as a National Estuarine Sanctuary under provisions of the Coastal Zone Management Act of 1972. It is expected that programs associated with this designation will be defined and implemented over the planning period.

Long-term studies of how large-scale changes in land use affect plant and animal communities will be emphasized over the planning period. It is anticipated that some staff additions and significant support for scientific equipment and supplies will be needed to conduct this research. These resources will be focused on studies of the recovery of abandoned agricultural lands to ascertain how plant and animal communities develop following extended periods of agricultural use.

Also anticipated is an expanded effort to investigate the ecology of estuarine waters at the Center. The goal of this work is to determine the exchange of materials (fish, crabs, plankton, nutrients, and sediments) between Rhode River and Chesapeake Bay and, thereby, to understand the importance of subestuaries to the overall biological health of Chesapeake Bay. This research program will require the installation of water quality monitoring stations and fish entrapment devices in addition to equipment, supplies and some staff. In order to assist in the refinement of data already collected, a new interactive computer system was installed in FY 1982.

Educational research and public information activities are aimed at improving the quality and effectiveness of outdoor-centered education and achieving maximum utilization of the Center's research findings. In FY 1983, the Center will begin exploring options for additional education activities in order to support increased demands for visitation which may result from the Center's designation as a National Estuarine Sanctuary. It is anticipated that funds may be available from the State of Maryland to construct a joint-use education center for the Sanctuary. In addition, fund-raising efforts will be directed towards providing field tours and to assembling a slide presentation to introduce visitors to basic principles of estuarine ecology. A small computer-based exhibit also may be planned. Over the next five years, the Center also expects to expand its educational research activities with the assistance of outside funds, particularly the publication and dissemination of current studies on how informal educational institutions can improve the utilization of their facilities for public purposes. Some professional staff additions will be sought during the planning period for this program over the next several years.

The Center has accomplished the first and second phases of its six-phase plan for facilities development and the third phase, a combined laboratory and office building, is now being planned. Construction funds will be sought for this facility and for a new access road into the Center's grounds. A master plan for water and sewer upgrading is expected to be completed in FY 1983. More information on planned facilities is contained in the Facilities chapter of this document.

Zoological Park. Over the planning period, construction of exhibit facilities related to the Master Plan will near completion. In FY 1983, the Small Mammal and Monkey Island exhibit will open to the public. In FY 1985, construction is scheduled to begin on the Entranceway and Olmsted Walk Exhibits. This latter project will provide a number of small exhibits along the walk to bridge the gaps between the larger animal facilities. The Health and Research Hill project is scheduled for construction in 1986 and will provide for the complete modernization of the Rock Creek animal health facilities, along with renovation of the Holt House. The construction of the Parking Facilities, scheduled to begin in FY 1987, will allow us to centralize parking for the Zoo visitor. The Aquatic Habitat Exhibit is to be the final animal facility constructed under the Rock Creek Master Plan and will be deferred during the present planning period.

The Zoo will continue to develop long-term programs in the areas of zoological and biomedical research and genetic studies. Field activities in selected neotropical sites will continue to study the differences and similarities in ecosystems. These studies emphasize the behavioral ecology of wildlife, population dynamics and inbreeding in natural populations. To support the expanding research efforts during the planning period, the Zoo plans to strengthen its computer systems and usage. New equipment will allow for the fast and accurate manipulation of data.

In the collection management area, reproduction efforts in rare and endangered species will continue. Long-term breeding and research programs are continually being implemented in an effort to minimize the need to take animals from the wild. Expansion of nutritional programs, covering the planning period, will insure the health of a valuable collection.

Symposia and monograph publications will continue to contribute to the diffusion of knowledge among professionals and students. Additional efforts will be made to expand existing educational programs to reach high school, college and adult level audiences. Efforts will continue to be made to make the visiting public more aware of the plight of endangered species through the use of signs, labels and expanded graphics.

In the facilities management area, sound preventative maintenance programs are being established to care for the Zoo's physical plant. In light of reduced budget targets and lower personnel ceilings, a number of service contracts for grounds, vehicle and facilities maintenance will be initiated in FY 1984. The Zoo's core staff will continue to provide basic maintenance and service contracts will be implemented in areas that require only periodic scheduled maintenance.

In order to meet the public demands on the Zoo facilities, including requirements related to newly constructed facilities, a moderate increase in staffing levels and financial support over the planning period will be required.

Science Resource Growth

Overall, Science resources may approach \$87,000,000 in FY 1988 from FY 1982 levels of about \$66,000,000. Scientific research grants and contracts are expected to increase from about \$13,000,000 in FY 1982 to about \$18,000,000 in FY 1988. Restricted and unrestricted support of Science activities is expected to grow somewhat to about \$10,000,000 from current levels of \$9,000,000. The balance of funding will be sought through the appropriations process, principally for operations and programs of the Natural History Museum (for operating resources associated with collection management and research activities), the Tropical Research Institute (expenses related to the Barro Colorado Nature Monument and strengthening the research programs), the Astrophysical Observatory (including requirements for strengthening of operations at Mt. Hopkins), the Chesapeake Bay Center (for watershed and other research), and the Zoo (for operations and staffing associated with new facilities at Rock Creek and the Front Royal, Virginia, Conservation Center).

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 3 (1)

SCIENCE	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
ASSISTANT SECRETARY FOR SCIENCE														
FEDERAL SALARY & EXPENSES	7	333	7	369	7	390	7	390	7	390	7	390	7	390
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	89	0	55	0	65	0	62	0	62	0	63	0	63
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	5	0	4	0	0	0	0	0	0	0	0	0	0
RESTRICTED	1	129	1	96	0	116	0	309	0	287	0	297	0	287
FEDERAL GRANTS & CONTRACTS	2	188	2	194	2	204	2	220	2	237	2	256	2	277
-SUBTOTAL	10	744	10	718	9	775	9	981	9	976	9	1006	9	1017
MUSEUM OF NATURAL HISTORY/MUSEUM OF MAN														
FEDERAL SALARY & EXPENSES	517	17173	503	17844	503	18797	503	20195	503	20893	503	21156	503	21170
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	60	0	11	0	7	0	7	0	7	0	7	0	7
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	1	0	1	0	1	0	0	0	0	0	1	0	1
-ALL OTHER	0	501	0	192	0	192	0	170	0	159	0	164	0	169
RESTRICTED	6	1877	6	2027	6	2303	6	2366	5	2327	6	2333	5	2427
FEDERAL GRANTS & CONTRACTS	31	1269	29	1307	19	1050	19	1050	19	1081	19	1097	18	1110
-SUBTOTAL	554	20881	538	21382	528	22350	528	23788	527	24467	528	24758	526	24884
ASTROPHYSICAL OBSERVATORY														
FEDERAL SALARY & EXPENSES	78	5694	78	6463	78	6892	82	7195	86	7578	88	7913	89	8348
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	65	2518	65	2438	65	2559	65	2687	65	2821	65	2962	65	3110
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	2	143	2	135	2	135	2	144	2	151	2	158	2	167
-ALL OTHER	0	514	0	261	0	294	0	341	0	366	0	393	0	422
RESTRICTED	1	171	1	158	1	176	1	102	1	79	1	83	1	87
FEDERAL GRANTS & CONTRACTS	130	10551	116	10506	134	12332	142	12725	158	13743	165	14949	167	15596
-SUBTOTAL	276	19591	262	19961	280	22388	292	23194	312	24738	321	26458	324	27730

SMITHSONIAN INSTITUTION

APPLICATION OF OPERATING FUNDS

FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 3 (2)

SCIENCE	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
TROPICAL RESEARCH INSTITUTE														
FEDERAL SALARY & EXPENSES	85	2923	86	3025	86	3319	92	3519	97	3681	101	3834	106	3946
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	2	78	2	78	2	76	2	80	2	84	2	88	2	92
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	5	0	73	0	76	0	83	0	86	0	89	0	91
-ALL OTHER	0	141	0	27	0	26	0	0	0	0	0	0	0	0
RESTRICTED	0	81	0	109	0	66	0	30	0	30	0	30	0	30
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	87	3228	88	3312	88	3563	94	3712	99	3881	103	4041	108	4159
RADIATION BIOLOGY LABORATORY														
FEDERAL SALARY & EXPENSES	48	1961	48	2126	48	2222	49	2402	50	2512	51	2602	52	2732
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	87	0	83	0	77	0	78	0	80	0	85	0	88
RESTRICTED	0	27	0	29	0	24	0	18	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	1	85	1	40	1	40	0	0	0	0	0	0	0	0
-SUBTOTAL	49	2160	49	2278	49	2363	49	2498	50	2592	51	2687	52	2820
NATIONAL AIR & SPACE MUSEUM														
FEDERAL SALARY & EXPENSES	222	6386	222	7250	222	7678	222	7913	223	7930	224	7988	225	8008
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	8	0	5	0	5	0	5	0	5	0	5	0	5
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	23	1360	23	1470	23	1584	23	1632	23	1681	23	1731	23	1783
-ALL OTHER	8	633	8	872	8	928	8	954	8	982	8	1009	8	1039
RESTRICTED	2	64	2	70	2	24	1	71	1	31	1	71	1	29
FEDERAL GRANTS & CONTRACTS	2	108	1	144	1	81	1	116	1	117	1	118	1	119
-SUBTOTAL	257	8559	256	9811	256	10300	255	10691	256	10746	257	10922	258	10983

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 3 (3)

SCIENCE	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
CHESAPEAKE BAY CENTER														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	22	911	23	975	23	1017	25	1113	27	1166	30	1220	32	1278
-PROGRAM & ADMINISTRATIVE	1	58	1	63	1	67	1	70	1	73	1	77	1	81
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	27	0	34	0	29	0	30	0	30	0	30	0	30
-ALL OTHER	0	92	0	12	0	12	0	12	0	12	0	12	0	12
RESTRICTED	0	72	0	16	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	10	350	8	435	2	289	8	300	8	300	8	300	8	300
-SUBTOTAL	33	1510	32	1535	26	1414	34	1525	44	1581	47	1639	41	1701
NATIONAL ZOOLOGICAL PARK														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	327	9271	327	10012	327	10577	338	11394	354	11842	370	12380	376	12940
-PROGRAM & ADMINISTRATIVE	0	18	0	5	0	5	0	5	0	5	0	5	0	5
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	77	0	116	0	92	0	96	0	99	0	102	0	105
RESTRICTED	0	37	0	50	0	43	0	46	0	47	0	48	0	49
FEDERAL GRANTS & CONTRACTS	6	297	6	221	6	235	6	240	6	247	6	254	6	262
-SUBTOTAL	333	9700	333	10404	333	10958	344	11781	360	12240	376	12789	382	13361
SCIENCE-SUMMARY														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	1306	44652	1294	48064	1294	50892	1318	54121	1347	55992	1374	57483	1390	58812
-PROGRAM & ADMINISTRATIVE	68	2829	68	2655	68	2784	68	2916	68	3057	68	3207	68	3363
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	25	1536	25	1713	25	1825	25	1889	25	1948	25	2009	25	2072
-ALL OTHER	8	2050	8	1567	8	1621	8	1651	8	1698	8	1765	8	1835
RESTRICTED	10	2458	10	2555	9	2758	8	2942	7	2801	8	2862	7	2909
FEDERAL GRANTS & CONTRACTS	182	12848	163	12847	165	14231	178	14651	194	15725	201	16974	202	17664
-TOTAL	1599	66373	1568	69401	1569	74111	1605	78170	1657	81221	1692	84300	1700	86655

HISTORY AND ART

History and Art at the Smithsonian is defined to embrace the following organization units: The Museum of American History, which is primarily concerned with American history and the history of technology; the Museum of American Art, which is the Smithsonian's museum devoted to the history of American art, along with its subsidiary, the Renwick Gallery, which displays decorative arts and crafts; the Portrait Gallery, which studies American biographic history through the various media of portraiture; the Hirshhorn Museum and Sculpture Garden, which is the Smithsonian's museum of modern art; the Freer Gallery of Art, which covers the broad fields of Near and Far Eastern art; the Cooper-Hewitt Museum, which focuses its program on design and holds one of the major decorative arts collections in the world; the Archives of American Art, the nation's largest repository of documentary materials pertinent to the study of American art history; the Joseph Henry Papers Project, which edits and publishes the papers of Joseph Henry, the first Secretary of the Smithsonian and a leading scientist in the mid-1800s; the Museum of African Art, which deals with traditional art forms of the Continent of Africa; the Anacostia Neighborhood Museum and the Division of Performing Arts, which were transferred from the Public Service to the History and Art operational sector in the fall of 1982; and the Office of the Assistant Secretary for History and Art, which provides overall guidance and coordination.

The resources and programs of the Office of American and Folklife Studies are also administered by the Assistant Secretary for History and Art, as are the major Exhibition Program and the Trust Fund Collections Acquisition Program. These activities are contained in the Special Programs chapter to provide consistency with the FY 1984 budget to Congress.

Each of the History and Art museums has its own physical plant, its own distinctive collections, and its own specialized staff, and, more importantly, its own character and sense of purpose. Although the Freer Gallery of Art opened more than 50 years ago, the preponderant activity in History and Art at the Smithsonian has been developed largely over the last twenty years, in most instances following specific enactments by the Congress. The budgets for History and Art activities have grown at a measured pace, and most of the bureaus are now reasonably well funded to carry out at least the basic charge each has been given.

Current Resources and Support

Current funding for History and Art activities consists of a mixture of appropriated federal funds, infrequent federal grants and contracts, nonappropriated restricted trust funds, and allocations of nonappropriated unrestricted trust funds. In FY 1982, resources available to History and

Art programs amounted to approximately \$36,800,000 and 771 full-time positions. About 60 percent of the dollar figure and 87 percent of the personnel represent federally appropriated support for basic exhibit, research, education, and administrative activities of the museums and galleries. Most of the balance consists of resources associated with trust operations, with only a small portion originating in federal grant and contract work. A breakdown follows:

<u>Source of Funds</u>	<u>FY 1982</u>	
	<u>Full-Time Employment</u>	<u>Funds (\$000s)</u>
Federal Salaries & Expenses	672	\$22,080
Unrestricted trust	51	11,337
Restricted trust	48	3,301
Federal Grants & Contracts	<u>-</u>	<u>117</u>
Total	771	\$36,835

Unrestricted trust fund support is concentrated primarily in the Cooper-Hewitt Museum, Museum of American Art, Museum of American History, and the Division of Performing Arts. Restricted trust fund support is largely directed to the operations associated with the Freer Gallery of Art, the Cooper-Hewitt Museum, and the Archives of American Art. Only minor amounts of grant and contract work are present in the Cooper-Hewitt Museum and Museum of American Art.

Generally, the larger of the History and Art bureaus--the Museum of American History, the Museum of American Art, the Hirshhorn Museum and Sculpture Garden, the Portrait Gallery--are supported predominantly with federal funds. Their exhibition, research, collections management, and building operations comprise their major expenses. Each of these museums, however, has small amounts of trust funds (at most about 10 percent of the total resources) made available by donors for specific purposes, and from proprietary activities (bookstores, museum shops, cafeterias and the like), on their respective premises. These latter funds are used for a variety of program purposes.

The operationally smaller History and Art bureaus--the Freer Gallery of Art, Cooper-Hewitt Museum, Museum of African Art, Archives of American Art, and Anacostia Neighborhood Museum--work with more evenly mixed financing. Most of the Freer's principal programs are financed by the income from a restricted endowment fund established by Mr. Freer's Will; federal funds support the costs of protecting and managing the collections and building, and general administration. The Cooper-Hewitt Museum receives an annual allocation of Smithsonian unrestricted trust funds to help support its programs; beginning in 1979, federal funds supported a small portion of the exhibition program as well as the costs of maintaining

and protecting the building and collections and a share of administrative costs. In addition, the Cooper-Hewitt Museum raises in excess of a million dollars annually to support its exhibitions and related educational activities. The Museum of African Art raises from \$50,000 to \$100,000 per year from private sources to finance certain of its educational activities and the retirement of real estate mortgages it incurred before joining the Smithsonian. The Archives of American Art's Board of Trustees raises between \$300,000 and \$400,000 each year to support more than one-third of the Archives' program.

In addition to this general pattern of fund availability and use, the History and Art units are eligible for allocations from the special trust fund Collections Acquisition, Scholarly Studies, and Education Programs, and from the Special Foreign Currency Program. They also enjoy the presence of pre- and postdoctoral research fellows selected competitively through the Smithsonian's fellowship awards program and funded with nonappropriated unrestricted trust funds.

Future Year Prospectus

For the next five years, the single most comprehensive change in History and Art programming will be occasioned by the Quadrangle development. Affecting both the Museum of African Art and the Freer Gallery of Art, this major construction project will provide the long-overdue opportunity to present non-Western art to the visiting public in facilities commensurate to the importance of African, Middle Eastern and Asian art in the broad spectrum of man's creative history. FY 1983 will see continued fund-raising activities to secure matching monies to complement federal construction appropriations, refinement of interior and exterior architectural plans, and ground breaking. During construction, program plans for major opening exhibitions and educational activities will be receiving priority attention, along with logistical planning for collections management, security, research programs and all other aspects of museum management. Resources for such program development for the Freer Gallery and the Museum of African Art amount to about \$3,200,000, including approximately 60 new positions, over the planning period. These resources concentrated in exhibition, education, and conservation efforts are in addition to appropriations required for basic building management, security, and utility costs which, by 1988, should total 128 positions and \$3,500,000. Programs and operational resource projections for the Quadrangle are presented in Table 13 (and include amounts allowing for inflation).

Some of the world's richest collections in American art and material culture are found in the museums of the Smithsonian Institution. They range from large holdings of decorative arts--furniture, silver, textiles, porcelain and glass--to folk arts and the fine arts, including major collections of paintings, sculpture, prints, and drawings. Supporting the collections are unparalleled resource materials such as the historical documents in the Archives of American Art and the Anacostia Neighborhood Museum, the Inventory of American Paintings, photographs, and libraries, as

well as recognized scholars working in various areas of American art and history. By virtue of the richness and diversity of the Smithsonian's collections and its documentary and staff resources, the Institution has become, in fact, a major center for the study of American art and material culture. This center can and should be strengthened by building up its individual parts, including research programs, exhibitions, teacher-training, lectures, and courses, primarily at the Museum of American Art, the Portrait Gallery, the Museum of American History, the Archives of American Art, and the Anacostia Neighborhood Museum. Toward this objective, the Institution will continue to seek the funds needed to permit balanced program presentations. In future years, increased support for exhibits production and scholarly positions, as well as for expanded publications, both on collections and for exhibitions, will be requested. In the future, if the Trade (Tariff) Commission Building becomes available to the Institution, it would serve as the central focus for these activities in American studies. Although the availability of the building is in question, the Institution remains hopeful of securing it eventually for this important purpose.

A central part of the Institution's exposition of American culture is the Museum of American History. Building on recent improvements in collection management, inventory, conservation and storage programs, and energized in its public aspect by new major exhibitions (the first of which was a major retrospective of George Washington on the occasion of his 250th birthday in February 1982), the Museum will be very active in all aspects of its programming during this five-year period. Early in 1982, the Museum finalized its ten-year exhibition plan. The objective of this exercise was to balance the exhibition programming of the Museum against its other management objectives and to tailor the lengthy process of conceiving, designing, and producing exhibitions to the resources projected over the ten-year period. With this process in place, the Museum was able to turn to its longstanding commitment to public education, beginning a planning process which will yield preliminary results over the next fiscal year. Stressing the fundamental importance of the management of its collections through its programs in conservation, inventory, archives and storage, the availability of new conservation laboratory spaces and more accessible reference/storage facilities at the Museum Support Center and Suitland will provide an opportunity to begin the systematic identification and treatment of deteriorating artifacts and materials.

By June 1983, the Museum will finish the shelf inventory of the collections, begun under Congressional mandate in 1978, and has designed and begun to implement a computer program of collections management, capitalizing on the inventory's achievements. Along with this initiative, the Museum had addressed its long-term storage needs by planning its use of the Museum Support Center soon to open at Silver Hill. Meanwhile, three of the existing storage buildings at Silver Hill have been renovated, and this effort to improve existing storage facilities will continue until all are brought up to the standard set by the Museum's storage plan.

The extensive collections of graphic and archival materials distributed throughout the curatorial divisions of the Museum were put under the care of an archivist hired at the end of the calendar year. Likewise, this year the Museum was able to renew the staff charged directly with the care of the artifactual collections, by restoring curatorships long vacant and lost to attrition. The Museum's archives will be further developed into a center for the study and dissemination of information on our American heritage.

During the next five years, the most dynamic changes in the Museum will take place in its exhibits spaces. Immediately following the George Washington exhibition, reinstallations on the second floor will focus on collections documenting American cultural, social, and political history. After FY 1983, upgrading of other exhibition areas will concentrate on science, industry, and communications in America. Several special exhibit areas have been designated to accommodate a continuing series of high impact smaller exhibits. The renovated spaces will incorporate not only new historical concepts and ideas but also innovative exhibition techniques. Increasing emphasis will be placed on human aspects of the making and use of objects in an effort to make the collections more relevant and meaningful to varied audiences. In connection with these improved installations, the Museum will produce a variety of education publications, self-guiding tour materials, and informative audiovisual presentations to involve the public in the Museum's programs.

Complementing these central efforts, each History and Art unit will be seeking to maintain high performance in all program areas, devoting special attention to selected high priority initiatives. For example, over the next several years, every History and Art bureau will continue to emphasize improved management of collections, from computerization of the records at the Museum of American History, Cooper-Hewitt, and the Archives of American Art, to the creation of loan exhibitions to museums throughout the country from the Hirshhorn Museum and Sculpture Garden collection (including Mr. Hirshhorn's bequest); and the creation of a union catalogue of all Smithsonian holdings of materials from Africa at the Museum of African Art. The Archives of American Art will intensify efforts to speed up processing, cataloguing and microfilming new collections, as well as purchase needed compact storage systems which will expand current storage capability by more than 40 percent. The Anacostia Neighborhood Museum will produce four major exhibits in its present Martin Luther King headquarters facility over the next few years prior to moving its total operations to a new facility in Fort Stanton. The Division of Performing Arts will be seeking to solidify its productions and program activities in new and more cost-effective directions. Additional conservation capability will be added to the Hirshhorn Museum and Sculpture Garden, the Museum of American Art, the Cooper-Hewitt Museum, and the Freer Gallery of Art, while the Museum of American History, the Portrait Gallery and the Museum of American Art will acquire more badly needed storage equipment and space. Other priorities include funding for exhibitions in all the museums with focus on refurbishing older exhibitions; exhibit catalogues, leaflets and checklists

for visitors; and planning for collection storage space at the Institution's new Museum Support Center in Suitland, Maryland. The Archives of American Art will develop fellowship and publications programs, the Hirshhorn Museum will add research assistance to the curatorial staff, and the Joseph Henry Papers Project will publish four more volumes of the papers of this eminent American scientist. Finally, a continuing priority for each of the museums will be increased funding for acquisitions.

To meet the goals outlined for the next five years, it will be necessary throughout History and Art to add staff positions, primarily in collections management, conservation, exhibitions, and education. To this end, budgetary adjustments within bases will be made and some new resources, both federal and trust, will be sought.

Other Programs. Other priorities within History and Art through FY 1988 are largely related to improved physical facilities. A more intense review and consideration of long-term facility needs of the Anacostia Neighborhood Museum will take place, particularly with regard to possible sites and other factors related to the future growth of the Poplar Point area in the city of Anacostia. Enclosure of the Freer Gallery of Art's courtyard would do much to capture a valuable additional public space, as will remodeling the Freer's lower level to accommodate the physical connection with the first level below grade of the new Quadrangle. Construction of viable office and work space in the garage of the American Art and Portrait Gallery Building, as well as the balcony area, will be necessary. Efforts to raise private funds for the development of the Quadrangle, which will benefit both the Museum of African Art and the Freer Gallery of Art, will continue, as will exploration for donors to support renovation of the Miller House which adjoins the Carnegie mansion and is part of the Cooper-Hewitt Museum in New York. Its renovation is essential for full use of the needed galleries for temporary exhibitions, expanded educational facilities and office space. In addition, completing facade repairs to the Renwick Gallery is a high priority for this period, as is the renovation of older storage buildings at the Institution's Silver Hill facility. These various construction and renovation efforts represent by far the largest need for direct new funding on the part of History and Art bureaus of the Smithsonian. Progress on all of these facility requirements is expected by FY 1988. Additional information is contained in the Facilities chapter and the Beyond 1988 chapter of this document.

History and Art Resource Growth

In FY 1988, resources in History and Art are expected to reach about \$40,000,000 from the present FY 1982 level of about \$37,000,000. Projected increases in federal appropriations are principally associated with continued improvement in collection management capability; future year operations of the Museum of African Art and Freer Gallery in their new Quadrangle facilities; revitalizing the research programs of the Museum of American History; and expanding education, exhibition, and collection acquisitions at the Portrait Gallery, Museum of American Art, and Freer Gallery. Aside from the effect of the recent reorganization of the

Division of Performing Arts into the History and Art area, trust funds are forecasted to remain relatively stable as a result of expectations regarding unrestricted and restricted fund expenses associated with the Freer Gallery of Art, the Cooper-Hewitt Museum, and the Archives of American Art.

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 4 (1)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
HISTORY & ART														
ASSISTANT SECRETARY FOR HISTORY & ART														
FEDERAL SALARY & EXPENSES	4	355	4	181	4	199	4	198	4	198	4	198	4	198
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	1	95	2	121	2	124	1	125	1	128	1	129	1	132
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	18	0	8	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	5	469	6	310	6	322	5	323	5	326	5	327	5	330
JOSEPH HENRY PAPERS														
FEDERAL SALARY & EXPENSES	5	178	5	199	5	208	6	226	6	231	6	231	6	231
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	2	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	1	0	51	0	51	0	51	0	51	0	51
FEDERAL GRANTS & CONTRACTS	0	-1	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	5	179	5	200	5	259	6	277	6	282	6	282	6	282
MUSEUM OF AMERICAN HISTORY														
FEDERAL SALARY & EXPENSES	278	8261	278	8300	278	9200	292	9918	306	10344	317	10789	326	11102
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	1	97	1	77	1	77	1	77	1	79	1	79	1	81
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	9	0	9	4	268	4	205	4	225	4	235	4	245
-ALL OTHER	1	235	1	257	1	230	1	245	1	250	1	260	1	265
RESTRICTED	1	378	4	403	1	161	0	165	0	190	0	165	0	190
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	281	8980	284	9546	285	9936	298	10610	312	11088	323	11528	332	11883

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 4 (2)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
HISTORY & ART														
MUSEUM OF AMERICAN ART														
FEDERAL SALARY & EXPENSES	106	3850	106	4201	106	4395	108	4819	111	5291	112	5664	115	6043
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	36	0	25	0	25	0	25	0	25	0	25	0	25
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	5	0	8	0	8	0	9	0	10	0	11	0	12
-ALL OTHER	0	279	0	82	0	88	0	93	0	102	0	112	0	123
RESTRICTED	4	142	4	179	4	125	0	84	0	53	0	55	0	57
FEDERAL GRANTS & CONTRACTS	0	64	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	110	4376	110	4495	110	4641	108	5030	111	5481	112	5867	115	6260
NATIONAL PORTRAIT GALLERY														
FEDERAL SALARY & EXPENSES	76	2799	76	3018	76	3180	78	3346	79	3491	79	3609	79	3725
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	23	0	49	0	49	0	49	0	49	0	9	0	9
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	2	0	5	0	6	0	6	0	6	0	6	0	6
-ALL OTHER	0	547	0	42	0	52	0	53	0	53	0	53	0	53
RESTRICTED	3	228	3	253	3	219	3	230	3	150	0	50	0	50
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	79	3599	79	3367	79	3506	81	3684	82	3749	79	3727	79	3843
HIRSHHORN MUSEUM & SCULPTURE GARDEN														
FEDERAL SALARY & EXPENSES	80	2563	80	2713	80	3035	81	3392	82	3554	83	3670	83	3470
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	12	0	9	0	9	0	9	0	9	0	9	0	9
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	113	0	66	0	61	0	62	0	63	0	63	0	63
RESTRICTED	0	98	0	552	0	322	0	300	0	300	0	300	0	300
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	80	2786	80	3340	80	3427	81	3763	82	3926	83	4042	83	3842

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 4 (3)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
HISTORY & ART														
FREER GALLERY OF ART														
FEDERAL SALARY & EXPENSES	30	835	30	919	30	1081	31	1167	51	3800	61	2189	61	2469
UNRESTRICTED GENERAL	0	9	0	9	0	9	0	9	0	9	0	9	0	9
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	203	0	3	0	3	0	3	0	3	0	3	0	3
-ALL OTHER	22	1382	21	1423	21	1444	20	1482	20	1517	20	1552	20	1587
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS														
-SUBTOTAL	52	2429	51	2354	51	2537	51	2661	71	5329	81	3753	81	4068
ARCHIVES OF AMERICAN ART														
FEDERAL SALARY & EXPENSES	17	626	17	692	17	729	18	810	18	828	18	856	18	874
UNRESTRICTED GENERAL	0	3	0	6	0	6	0	6	0	6	0	6	0	6
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	18	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	11	605	11	624	11	607	11	621	11	640	11	659	11	679
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS														
-SUBTOTAL	28	1252	28	1322	28	1342	29	1437	29	1474	29	1521	29	1559
COOPER HEWITT MUSEUM														
FEDERAL SALARY & EXPENSES	22	733	22	803	22	843	23	866	24	911	25	958	26	1008
UNRESTRICTED GENERAL	10	365	9	352	9	358	8	358	8	333	8	333	7	308
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	9	514	10	523	10	554	10	575	10	600	10	625	10	650
-BUREAU ACTIVITY	4	273	4	238	4	250	4	275	4	300	4	350	4	375
-ALL OTHER	3	337	3	610	2	578	5	609	5	610	5	610	5	610
RESTRICTED	0	54	0	85	0	60	0	25	0	25	0	25	0	25
FEDERAL GRANTS & CONTRACTS														
-SUBTOTAL	48	2276	48	2611	47	2643	50	2708	51	2779	52	2901	52	2976

SMITHSONIAN INSTITUTION

APPLICATION OF OPERATING FUNDS

FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 4 (4)

HISTORY & ART	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
MUSEUM OF AFRICAN ART														
FEDERAL SALARY & EXPENSES	25	760	25	864	25	975	26	1000	46	4093	59	2670	59	2800
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	1	76	1	25	0	8	0	8	0	8	0	8	0	8
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	1	20	1	24	1	27	1	29	0	38	0	38	0	38
-ALL OTHER	0	1	0	6	0	6	0	0	0	0	0	0	0	0
RESTRICTED	4	109	3	83	3	77	2	43	1	26	0	50	0	50
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	31	966	30	1002	29	1093	29	1080	47	4165	59	2766	59	2896
ANACOSTIA NEIGHBORHOOD MUSEUM														
FEDERAL SALARY & EXPENSES	19	671	19	787	19	820	19	820	19	820	19	820	19	820
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	1	24	1	30	1	32	1	34	1	36	1	38	1	40
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	17	0	2	0	2	0	2	0	2	0	2	0	2
RESTRICTED	0	3	0	1	0	1	0	1	0	1	0	1	0	1
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	20	715	20	820	20	855	20	857	20	859	20	861	20	863
DIVISION OF PERFORMING ARTS														
FEDERAL SALARY & EXPENSES	10	449	10	488	10	514	15	829	15	864	15	899	15	934
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	22	8265	13	639	13	474	8	500	8	500	8	500	8	500
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	75	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	19	0	92	0	29	0	50	0	50	0	50	0	50
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	32	8808	23	1219	23	1017	23	1379	23	1414	23	1449	23	1484

SMITHSONIAN INSTITUTION

APPLICATION OF OPERATING FUNDS

FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 4 (5)

HISTORY & ART	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
HISTORY & ART-SUMMARY														
FEDERAL SALARY & EXPENSES	672	22080	672	23665	672	25178	701	27391	761	34425	798	32553	811	33674
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	14	741	14	703	13	697	11	700	11	682	11	645	10	627
-AUXILIARY ACTIVITY	22	8265	13	639	13	474	8	500	8	500	8	500	8	500
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	10	550	11	569	15	863	15	824	14	879	14	915	14	951
-ALL OTHER	5	1781	5	704	5	692	5	733	5	773	5	843	5	884
RESTRICTED	48	3301	49	4221	45	3614	41	3636	40	3588	36	3543	36	3625
FEDERAL GRANTS & CONTRACTS	0	117	0	85	0	60	0	25	0	25	0	25	0	25
-TOTAL	771	36835	764	30586	763	31578	781	33809	839	40872	872	39024	884	40286

PUBLIC SERVICE

Through its Public Service activities, the Institution has had considerable success in reaching national audiences over the last few years by means of publications, television and radio, lectures and conferences, live performances, and exhibition programs. Public Service organizations include the Office of Telecommunications; the Smithsonian Institution Press, including the consolidation of Smithsonian Exposition Books, the Press' own popular book sales program, and the recordings development production and sales program of the Division of Performing Arts within the Press; Smithsonian Magazine; and the Visitor Information and Associates Reception Center.

While organizationally part of the Institution's Public Service activities, the resources and programs of the Offices of Elementary and Secondary Education, and Symposia and Seminars, are contained in the Special Programs chapter to provide consistency with the FY 1984 budget presentation to Congress. Also, the Magazine and its resources appear in the chapter devoted to Associates Programs because of the general support the Magazine provides to many programs of the Institution and because it is viewed as a major benefit to members of the Associates.

Over the next five years, a principal objective will be to continue to reach a more diverse and larger portion of the general public with the Institution's Public Service activities. The contents of programs and activities will emerge, as they have in the past, from accumulated Smithsonian expertise in science, history and art, as well as the Institution's basic museum collecting and exhibiting activities.

One factor lending impetus to public service development over the past few years has been the application of trust funds for educational outreach programs. The application of these funds to Smithsonian public service programs is expected to continue over the coming five years, and the projects and activities will continue to originate from and be produced by various organizations throughout the Institution. Such activities perform invaluable public services while at the same time reducing the requirements for federal appropriations.

Current Resources and Support

Resources in FY 1982 devoted to Public Service activities amount to about \$9,000,000 and 80 full-time employees who are at work in the various units.

A breakdown of FY 1982 resources follows:

<u>Source of Funds</u>	<u>FY 1982</u>	
	<u>Full-Time Employment</u>	<u>Funds (\$000s)</u>
Federal Salaries & Expenses	38	\$1,211
Unrestricted trust	42	7,539
Restricted trust	-	219
Federal Grants & Contracts	-	-
Total	80	\$8,969

Unrestricted trust fund support is, for the most part, concentrated in the expenses of the recently reorganized Smithsonian Press. The Visitor Information and Associates Reception Center is operated primarily with trust funds, but additional appropriated resources will be needed over the planning period. Restricted purpose funds are occasionally obtained for support of special activities sponsored by various units; occasional federal grants and contracts fund portions of publications and other educational endeavors. Federal appropriations largely support the publication of the basic technical and scientific series distributed by the Government Printing Office, and other publications and conferences. Over the next five years most Public Service functions will grow somewhat, with staff and dollar resources added only to meet the most urgent needs. Increased federal support will be requested for the Visitor Information and Associates Reception Center planned to be administratively located in the Quadrangle to provide improved services to visitors and to individuals making inquiries about institutional activities via letters and telephone. Substantial growth is expected to occur in trust expenses for the Press' publication activities over the planning period.

Future Year Prospectus

Office of Telecommunications. Through films, video and radio programs the Office of Telecommunications continues to reach a variety of audiences across the country. The Office is constantly monitoring new developments in the media and is exploring a number of possible projects for cable, home video, videodisc, teleconferencing, and low-power television. At the same time it is building on the current base of films and ongoing radio programs to create new materials for both commercial and public broadcasting. The consolidation in this Office of film and television personnel now located in the Institution will strengthen its capacity to serve the Smithsonian.

Under a grant from the McDonnell Foundation, the Smithsonian, in conjunction with WETA-TV, is developing a major series for public TV to be called Smithsonian World. Preliminary planning is being completed currently, and the first of seven one-hour programs to be produced under the grant is expected to air in early 1984.

The Office's new series of video featurettes, Here at the Smithsonian, was launched in 1982, and is already meeting with enthusiastic response. Patterned on the highly successful Smithsonian Galaxy radio programs, the series is seen now on 40 stations nationwide. Smithsonian Galaxy, meanwhile, won a Gold Medal at the International Radio Festival of New York, in a competition that included more than 750 entries.

Radio Smithsonian, the Institution's weekly half-hour series, continued its strong showing among public radio stations around the country, and also added new commercial stations to its subscriber list. Staff members developed special radio programs apart from Radio Smithsonian, including an evocative commemoration of the 200th anniversary of the battle of Yorktown and a well-received series of live Smithsonian concert broadcasts, distributed via the National Public Radio satellite system. The success of these efforts encourages the planning of more such programs in the future. These would include a number of discrete series, beginning with one on the history of country music (based on the Smithsonian album), and a program marking the bicentennial of the Treaty of Paris--the true birth of American independence--in 1983.

In 1982 the Office completed the film In Open Air: A Portrait of the American Impressionists, which toured Europe with a major exhibition organized by the Smithsonian Institution Traveling Exhibition Service. Having had its national PBS showing in the fall of 1982, the film received high praise abroad and won a bronze CINDY award in a competition sponsored by the Independent Film Producers of America. Several film projects are now in development for the future. In conjunction with SITES, the Office is working toward a film on American artists of the '20s and '30s, another exhibition for European distribution and for distribution in this country. Also in prospect is a richly woven film focusing on the Treaty of Paris bicentennial.

The Office is working with other Smithsonian bureaus on several projects for the future. Among these is an exploration of teleconferencing, undertaken with the Resident Associate Program, which could result in live transmission of Smithsonian educational programs to participating students at universities around the country. Already in the marketplace is the series Jazz at the Smithsonian, produced in conjunction with the Division of Performing Arts. Sales potential in the cable market appears promising, and could pave the way for other such video projects in the future. Another proposal with potential is a cultural and scientific programming alliance for cable or satellite transmission, with the Smithsonian working in cooperation with the National Geographic Society.

Visitor Information and Associates Reception Center. The Center is the Institution's central service organization charged with providing a wide variety of information and assistance to the public, Associate members and Smithsonian staff. Many of its activities involve the coordination and direction of large numbers of volunteers. Information service activities include scheduling a corps of 400 volunteers to staff museum information desks, providing tours of the original Smithsonian Building, responding to well over 300,000 telephone inquiries annually and

conducting slide/lecture orientations for hundreds of visiting groups from across the country. In addition, the Center operates a registration and placement service for some 700 behind-the-scenes volunteers who provide the scientific and curatorial staff with ongoing short- and long-term project support. It is estimated that the volunteer effort under the supervision of the Center saves the Institution over \$1,000,000 each year.³ Responding to public inquiries through the mail is another Center responsibility and requires research, response and referral of the Institution's public mail, which averages over 4,000 requests monthly. This unit is also actively engaged in providing assistance to each Smithsonian bureau in the development and production of preprinted materials for public distribution. A new program to provide visitor information and orientation assistance on the Mall during the summer peak visitation months has now been firmly established.

The Institution expects a growing workload for this organization and the services it provides. In future years, added trust and particularly federal support is planned to accommodate the needs of the Associates and general public.

Smithsonian Institution Press. The Press, in its official function, serves the Institution's requirements for quality publication of the growing number of research studies and monographs, art and exhibit catalogues, brochures, information guides, records, etc., which are produced by Smithsonian staff in fulfillment of the Institution's federally funded activities. In addition, the Press has set as its long-range goal careful but steady expansion of the trust-funded university press activities to annual publication and distribution levels of up to 50 (from the current level of about 20-30) significant scholarly and general trade books on subjects relevant to Smithsonian collections or research interests. In addition, the Press will continue to improve its steadily expanding capability in marketing, and warehousing and order fulfillment, with the basic objective of enabling the Smithsonian Institution to publish broadly at a minimum of expense, or preferably none at all. In FY 1982, unrestricted trust funded operations produced an approximate \$393,000 in net proceeds utilized for various activities and programs of the Institution. Some surplus is projected to continue for these operations.

Examples of manuscripts to be published in the federally funded series in FY 1983 are: The Hammered Dulcimer, Geology and Paleontology of the Lee Creek Mine, North Carolina, I, U.S. Women in Aviation: 1919-1929, and Pacific Plate Biogeography with Special Reference to Shorefishes.

-
3. Institution-wide efforts, involving volunteers in various bureaus and galleries, are estimated at a dollar value in savings to the Institution of around \$6,000,000.

Some significant titles currently scheduled for trust funded publication in FY 1983 are: The Muses Flee Hitler, Horticultural Extravaganza of the Victorian Age, Finding Birds in the National Capital Area, and Habitats and Geology: A Smithsonian Guide to Natural Resources in the National Capital Area.

In order to strengthen further the book publishing program and to consolidate the direct-mail planning and sales of both books and records in the Institution, Smithsonian Exposition Books and the Recordings Program of the Division of Performing Arts have been reorganized into separate divisions within the Press. Smithsonian Exposition Books joined the Press in December 1981 and the Recordings Program was merged into the Press in October 1982. It is expected that this amalgamation will significantly strengthen the Institution's already strong presence in the book publishing field; result in several operating economies; and unify its books and records development, production, business management, marketing, and sales activities.

Smithsonian Press publishes through trust support popular books based on Smithsonian collections and research. Nine books have been published to date and have been sold primarily to Smithsonian Associates by direct mail.⁴ They are also sold to the book trade through a prominent commercial distributor. Development work is in progress on a series of small, relatively inexpensive books, plus other books on subjects based on Smithsonian activities, whose eventual publication is subject to satisfactory market testing and approval by the Smithsonian Publishing Council. In FY 1982, about \$277,000 in unrestricted trust funds was made available to various activities of the Institution as a result of the operations of the Direct Mail Division of the Press. The Institution expects that overall Press net operations will produce about \$300,000 in FY 1983 and will show a steady increase over the planning period.

Public Service Resource Growth

In FY 1988, resources associated with the conduct of Public Service activities may reach approximately \$16,000,000 from present levels of about \$9,000,000, with most of the increase associated with trust funded publications programs, and federal appropriations for visitor information services.

-
4. They are The Smithsonian Experience, The Magnificent Foragers, The Smithsonian Book of Invention, A Zoo for All Seasons, The American Land, Every Four Years, Fire of Life, Thread of Life, and The Best of Smithsonian (an anthology of the best articles to appear over the years in Smithsonian magazine).

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 5 (1)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
PUBLIC SERVICE														
ASSISTANT SECRETARY FOR PUBLIC SERVICE														
FEDERAL SALARY & EXPENSES	5	218	5	227	5	238	5	238	5	238	5	238	5	238
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	1	0	1	0	1	0	1	0	1	0	1	0	1
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	5	219	5	228	5	239	5	239	5	239	5	239	5	239
OFFICE OF TELECOMMUNICATIONS														
FEDERAL SALARY & EXPENSES	2	62	5	354	5	176	5	176	5	176	5	176	5	176
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	6	278	6	322	7	366	7	384	7	403	7	423	7	444
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	20	0	60	0	61	0	61	0	62	0	62	0	63
-ALL OTHER	0	137	0	100	0	50	0	0	0	0	0	0	0	0
RESTRICTED	0	219	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	8	716	11	836	12	653	12	621	12	641	12	661	12	683
VISITOR'S INFORMATION & RECEPTION CENTER														
FEDERAL SALARY & EXPENSES	2	45	2	66	2	150	2	150	2	150	2	150	2	150
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	12	459	12	454	12	482	12	506	12	531	12	557	12	585
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	4	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	14	508	14	520	14	632	14	656	14	681	14	707	14	735

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 5 (2)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
PUBLIC SERVICE														
SMITHSONIAN INSTITUTION PRESS														
FEDERAL SALARY & EXPENSES	29	886	29	988	29	1032	29	1032	29	1032	29	1032	29	1032
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	24	6640	33	11479	35	11975	35	12595	36	12718	36	12880	36	13129
-AUXILIARY ACTIVITY														
UNRESTRICTED SPECIAL PURPOSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	53	7526	62	12467	64	13007	64	13627	65	13750	65	13912	65	14161
PUBLIC SERVICE-SUMMARY														
FEDERAL SALARY & EXPENSES	38	1211	41	1635	41	1596	41	1596	41	1596	41	1596	41	1596
UNRESTRICTED GENERAL	18	738	18	777	19	849	19	891	19	935	19	981	19	1030
-PROGRAM & ADMINISTRATIVE	24	6640	33	11479	35	11975	35	12595	36	12718	36	12880	36	13129
-AUXILIARY ACTIVITY														
UNRESTRICTED SPECIAL PURPOSE	0	20	0	60	0	61	0	61	0	62	0	62	0	63
-BUREAU ACTIVITY	0	141	0	100	0	50	0	0	0	0	0	0	0	0
-ALL OTHER	0	219	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-TOTAL	80	8969	92	14051	95	14531	95	15143	96	15311	96	15519	96	15818

MUSEUM PROGRAMS

Museum Programs units have as their chief responsibility the provision of museum management and other services to the museums and research bureaus of the Institution. They also offer assistance, guidance, and technical services to museums throughout the United States and abroad and, in this connection, work closely with national and international organizations to advance the practices, methodologies and standards of the museum profession. They provide such services as traveling exhibitions; horticultural exhibitions and displays; and grants, special studies, and support training for various aspects of museum work. Museum Programs units report to the Assistant Secretary for Museum Programs and consist of the following activities: Office of Museum Programs, Conservation Analytical Laboratory, Office of the Registrar, Office of Exhibits Central, National Museum Act, Smithsonian Institution Libraries, Smithsonian Archives, Smithsonian Institution Traveling Exhibition Service, and the Office of International Activities. The Office of Horticulture and South Group Building Management are also managed through the Assistant Secretary for Museum Programs, but resources associated with these activities appear in the chapter on Administrative, Financial, and Other Support Services to be consistent with the Congressional budget presentation.

In recent years, there have been significant changes in the status and perception of museums. Their numbers have increased astonishingly everywhere; they have become integral to the educational process; they are more than ever held accountable for the quality and condition of important collections, and for the strength of their research and informational programs. In many parts of the world, museums have become a chief means of preserving and expressing national cultures and identities. These changes have created a need for better trained personnel in such areas as collections management encompassing accessions, registration, cataloguing, inventory control, security, and storage; conservation treatment and analysis; management of information about objects in collections; education; and general museum management. New fields of research, especially archaeometry, which is concerned with the basic characteristics of materials, have been recognized as vital to the study, understanding and conservation of museum collections. The use of fumigants and their impact on both museum materials and personnel must be better understood, and methods to conserve energy in museums, while still providing stable and secure environments for the collections, must be explored. Much of the effort of Museum Programs units is directed to these and similar issues.

Current Resources and Support

Total resources available to Museum Programs in FY 1982 approximate \$9,800,000 and 246 full-time positions. Of this total, federal appropriations amount to about \$7,800,000 and 215 positions, and support almost

entirely the units' basic work, with the exception of the Smithsonian Institution Traveling Exhibition Service (SITES). SITES relies to a large extent on unrestricted trust funds, most of which are generated by rental fees for the exhibitions circulated.

A breakdown for FY 1982 Museum Programs resources follows:

<u>Source of Funds</u>	<u>FY 1982</u>	
	<u>Full-Time Employment</u>	<u>Funds (\$000s)</u>
Federal Salaries & Expenses	215	\$7,788
Unrestricted trust	30	1,565
Restricted trust	1	277
Federal Grants & Contracts	<u>-</u>	<u>131</u>
Total	246	\$9,761

Other Museum Programs units funded by nonappropriated unrestricted trust funds in addition to federal appropriations are the Libraries, for the support of staff and related expenses, and the Smithsonian Archives, which has a small trust fund budget. The Office of Museum Programs has a revolving trust fund budget based on revenues received for handling and shipping costs for the circulation of audiovisual programs on conservation information. The borrowers of these programs, usually museums or academic institutions, are charged no rental fee for their use. The Office of Horticulture, South Group Buildings Management, and the Office of Exhibits Central also have special purpose trust fund accounts stemming from provision of services or production efforts for trust activities; these funds are used only to sustain these services.

Future Year Prospectus

Within this projected planning period, the Institution will establish and initiate a training program for conservators and conservation technicians at the Museum Support Center. The staff of the Conservation Analytical Laboratory is to be expanded to include a director of the Conservation Training Program, conservation training coordinators, and additional conservators and scientists. Resources projected for this effort are contained within the Special Programs table, but are described in some detail here. Collections management, particularly inventory, will receive continued attention, and the methods of handling the Institution's bibliographic and archival resources will be improved through automated systems and administrative refinements. The Smithsonian Institution Traveling Exhibition Service will expand its international program as well as develop new exhibitions for national audiences.

Museum Support Center. Construction of the basic structure for the Museum Support Center began in January 1981 and was completed in January 1983. Occupancy of the building for maintenance purposes, installation of the storage system, and preparation of the laboratories and other work areas began shortly thereafter. Throughout the planning process, and during the construction period, strict standards for suitable environmental conditions and security, as well as for laboratory functions, have been adhered to closely. Following a thorough study of the problem, a storage system of racks capable of holding a variety of integrated modular collection encasement units has been determined to be the most effective means of meeting the needs of the various Smithsonian museum departments to store collections there. The acquisition process for both storage and laboratory equipment began in FY 1981 and will continue through the planning period and beyond. It is planned to start the process of transferring collections as soon as possible after all the basic systems (fire, protection and environmental) are operational and have been thoroughly tested, and the first increments of storage equipment are installed. The first collections to be moved to the Center are "wet storage" collections from the Smithsonian Oceanographic Sorting Center, and from the Departments of Invertebrate and Vertebrate Zoology of the Museum of Natural History/Museum of Man.

Additional details regarding the construction, equipping and operations of the Museum Support Center appear in the Special Programs chapter and the Facilities chapter.

Conservation Research, Training, and Information. The plans developed in 1979 for the Conservation Analytical Laboratory in the Museum Support Center and for the facilities and training program for conservators and conservation technicians have remained substantially unchanged since their inception, and both program and budget growth will occur during the years immediately ahead. Within the Center, the Laboratory and training program will occupy the major portion of the 44,000 square feet of space assigned to conservation functions to be performed there. Other parts of this space will be used by the Anthropology Conservation Laboratory and by the Conservation Laboratory of the Museum of American History. Conservation treatment, as well as analytical and archaeometric research, presently performed by the Conservation Analytical Laboratory in the American History Building will be transferred to the new Museum Support Center.

Proper utilization of the new facilities will require a significant increase in staff for various organizations. The phasing of this growth takes into account the time required for construction of the Museum Support Center and acquisition of its equipment and furnishings. For the Conservation Analytical Laboratory, because of the difficulty in recruiting highly qualified and scarce conservation personnel, steps were taken in 1980 to prepare appropriate position descriptions so that personnel actions can be instituted on schedule. Precise specifications for special conservation equipment, particularly fumigation equipment which must be in place in the Center at the time of its occupancy, have been developed and

contracts for manufacture have been awarded. A substantial amount of other equipment was purchased in FY 1981 and FY 1982 and the process continues into FY 1983.

Special task forces, consisting of Smithsonian staff and personnel from the academic community, have been created to develop a training curriculum, prerequisites for entering students, faculty arrangements, and course completion requirements. Discussions are continuing with the administration and staff of two local universities, George Washington University and the University of Maryland, to explore ways in which conservation laboratory instruction and graduate and undergraduate level courses can best be integrated to produce a well-rounded and complete conservation training program. The issue of appropriate degrees or certification, or a combination of these, is being investigated. It is planned that a director of the Conservation Training Program will be appointed in FY 1983. Other staff positions important to the expanded conservation analytical and treatment functions, and to the training program, will be recruited over the planning period, particularly in FY 1983 and FY 1984.

In addition to attending to the development of activities that will occur in the Museum Support Center in the coming years, the Conservation Analytical Laboratory will continue to explore the best means of monitoring environmental conditions throughout the Institution's museums in an effort to stabilize relative humidity and temperatures in all areas housing exhibits and collections; it will continue its program of computerizing conservation data and related information which are the product of its ongoing work, and to establish closer linkage with similar systems elsewhere. As an example of this, the Laboratory has installed a system for gaining access to the British Museum for their conservation reports and the Index to Art and Archaeology Technical Abstracts. Future projects of the Laboratory will include the updating of conservation information videotapes which are distributed upon request to the museum profession, and the making of new videotapes of conservation processes while they are in progress. These tapes will provide a valuable record of laboratory work and will be used for training and instructional purposes. The Laboratory will continue its role of providing assistance and advice to curators in the identification and selection of objects requiring treatment. Other Institution-wide conservation matters are subjects of discussion of the Smithsonian Conservation Council which meets regularly.

Archaeometry undertakes to find solutions to art-historical or ethnographic problems by looking at large numbers of objects of known provenance to establish their common characteristics. It involves close interaction among the subject area specialists (art-historian or other) who supply the intellectual content of the problem, the research scientist, the conservation scientist, and the conservator. The vast and varied Smithsonian museum collections, which will be the subjects of study, coupled with the skilled human resources in those museums, offer an unparalleled opportunity for the resolution of vexing and complex art, historical and cultural questions. Beginning in FY 1983, the archaeometric activity of the

Conservation Analytical Laboratory will be centered in a newly formed Department of Archaeometry consisting, currently, of three full-time research scientists in addition to a number of senior visiting research fellows. The Department by 1986 will grow to at least six persons in addition to shared support personnel. Major fields of research currently include: neutron activation and lead isotope studies in cooperation with the Brookhaven National Laboratories and the National Bureau of Standards (NBS) and the autoradiography of paintings in cooperation with NBS. Subject to the availability of funds, a tomography and image enhancement program will also be developed for the nonintrusive examination of important objects.

In addition to strengthening archaeometric work on collections at the Institution, a major goal of the Department will be to become the recognized repository for the research files and sample collections of noted researchers in the field. To implement this important function an archaeo-archivist will be retained. The Laboratory, with the current joint program of seminars and studies, its newly formed Department of Archaeometry, and in cooperation with the National Bureau of Standards, will continue to participate in conferences on archaeometry, and in 1984 will sponsor the 24th International Symposium for Archaeometry, which will take place in Washington. This will, undoubtedly, provide major stimulus and suggest new directions on research for the Institution's Department of Archaeometry.

Collections Management. Collections management, particularly the maintenance of inventories of collections, has been established as an institutional priority for the coming years. Aside from the issues and requirements associated with the Conservation Analytical Laboratory and the specific references to collections management/inventory matters appearing in the Science, History and Art, and other chapters, the Office of the Registrar will play an increasingly important role in collections management over the planning period. The Office will provide continuing assistance to bureaus in management of information about objects in collections, and will maintain information on the progress of collection inventory projects in the various bureaus. In addition, the Office will pursue implementation of recommendations made in the 1977 report on collections management to develop training programs to support Smithsonian personnel working in collection registration and related functions. The Office will continue to oversee the affairs of the Smithsonian's Registrarial Council and will collect and disseminate collections management information through this group.

In FY 1980, the Office integrated an Institution-wide approach for developing a statement on overall collections policies. Throughout FY 1981 and FY 1982, each bureau developed its policy, dealing with procedures on such specific topics as acquisitions, deaccessioning and loans. This Office conducted reviews and offered recommendations for preparation of the final drafts of those policies. In the future, the Office will maintain a complete file of the individual policies, along with other data on collections management, so that all relevant information on these activities may be readily accessible.

An important activity of the Office of the Registrar has been to work with a variety of organizations for the development of standards for national and international museum data exchange of information about collections. This work will continue and will be accelerated in future years. The Office also plans, in FY 1985, to establish a specialized transportation function that will assist and advise museums and other bureaus with the movement of collection objects among museums and the Museum Support Center.

Smithsonian Libraries. The Smithsonian Institution Libraries is a major American academic research library system, serving Smithsonian and non-Smithsonian scholars through its collections and staff services. The Institution during the forthcoming planning period will try to address and solve some of the long-standing problems associated with the system. Foremost among these is inadequate space. The Institution will try to provide consolidated space to house safely the overflow of collections. Various solutions have been considered in the past, but were not approved or implemented because of higher priority space and facility needs. While the Institution's policy is to lease new space for programs only as a last resort, a request for this purpose may be contained in the FY 1985 budget. The Institution must also consider remaining renovation needs of the central library space located in the Museum of Natural History Building, along with the need to create atmospherically sound stack areas in all of the branches of the system.

Plans call for a complete, on-line bibliographic data base system (acquisitions, cataloguing, catalogue access, interlibrary loans, serial check-in, and circulation) for the entire network of Smithsonian Libraries and FY 1984 is the target date for implementation. Increased automation will provide greater access to Smithsonian library resources by the national research community and reduce the long-range rise in the cost of library services. Detailed planning for the system is now under way in the Libraries with the cooperation of the Office of Information Resource Management.

During fiscal years 1984-1988, emphasis will be placed on the indexing and conservation of the 225,000-piece trade literature collection, the preservation of collections through new mass-deacidification techniques, acquisition and conversion of collections to microform and optical disc, and the cataloguing of backlogs of various materials by contractors. The book conservation laboratory, staffed by a professional team, continues to treat the most fragile and critical books and papers with advanced techniques and equipment. The Libraries' collection development philosophy and practice are expressed in a new policy developed over the last two years, which guides purchasing, preservation, miniaturization, and all aspects of collection management.

In FY 1980-1981 experiments were conducted with telefacsimile transmissions among selected libraries of the Institution, and since 1978 the use of on-line, commercially available data bases has been expanding. In addition, resource sharing with federal and research libraries, especially

with the Library of Congress, has helped to control the need to acquire materials. In 1981, card catalogues were closed in favor of a computer-output microfiche (COM) catalogue. Conversion of older catalogue records into machine-readable form began in FY 1982, and is expected to be completed in FY 1985.

After space, automation, conservation, and collections, other important goals concern the greater role of the Libraries in the direct increase and diffusion of knowledge. A major research library has a responsibility to sponsor bibliographic research using its collections, and to make its collections of value to a wider audience. Over the next years, consideration will be given to expanding the Libraries' programs in research, publications and exhibition, and the placement of internships and fellowships.

Plans also include the accommodation of library requirements for new and expanded Smithsonian activities over the coming five-year period, notably the Museum Support Center. Expanded programs are planned for the Cooper-Hewitt Museum, the Smithsonian Tropical Research Institute, the Chesapeake Bay Center for Environmental Studies and the Museum of African Art.

The National Museum Act. Through its grants program, the National Museum Act (NMA) provides support to museums, professional museum associations, and academic institutions for training of museum personnel, museological studies, and for professional and technical assistance for the museum community.

These grants concentrate on museological issues and high priority is given to projects advancing conservation training and techniques. This emphasis is unlike the grant programs offered by the National Endowments which support, for the most part, art- or humanities-related programs, or those offered by the Institute of Museum Services which provides support for museum operating costs. The Office of the Assistant Secretary for Museum Programs and the NMA staff maintain continuing liaison with other organizations and with the Interagency Committee on the Arts and Humanities, all of which are concerned with support for various kinds of museum activity throughout the United States. The NMA continues to operate under the principles established in a memorandum of understanding that was developed with these organizations in 1979.

Reauthorization of the NMA is currently being sought for FY 1984, FY 1985, and FY 1986.

Other Programs. A strong demand continues for the museum training workshops, the visiting professionals program and the conservation audiovisual presentations produced by the Office of Museum Programs. At the request of local and regional museum associations and organizations, the Office conducts a number of training programs away from the Smithsonian; in these instances, co-sponsoring local organizations pay the expenses involved. The Office will further explore this type of cooperative arrangement as a means of making museum training accessible to more museum

personnel at no cost to the Institution, including workshops and internships presented on a cost-sharing basis with Native American tribal groups and associations. A review has begun of the inventory of audiovisual materials, and a number of items may be remade, particularly those for which the master tapes no longer lend themselves to quality reproduction. Additional audiovisuals on preventive care of collections will remain a priority for the Office, and the distribution is anticipated to be self-sustaining.

With a grant of approximately \$1,000,000 received in 1982 from the Kellogg Foundation, the Office of Museum Programs, in cooperation with the Resident Associate Program, is conducting a three-year program designed to improve the educational impact of museums. An advisory council, national in scope and composed of representatives of academic institutions and museums, has been established to guide the program, and, through a series of workshops, seminars, videotapes, internships and residencies, specific measures are being explored, reviewed and tested.

The Smithsonian Archives uses automatic data processing extensively to sort various indexes to the Archives and to publish the Guide to the Smithsonian Archives. During the period FY 1983 to FY 1984, the archival program will be extended to all Smithsonian bureaus, to ensure preservation of official documentation. The archives will embark on a major program to identify records to microfilm and discard, and to accelerate the filming of those records. Increased efforts will be devoted also to the oral history project. Access to the collections will be improved by additional publications and further development of the Archives' information system.

The Office of Exhibits Central will continue to provide its general and specialized exhibition production services for the Institution's museums. The Office will also be involved in design, editing and production work for many new traveling exhibits and in special exhibitions that involve intermuseum cooperation. Examples of such exhibitions, in which the Office of Exhibits Central participated in FY 1982, are: American Impressionists, Quick Silver Galleons, Vanishing Race, and Ban Chiang.

For the Office of Horticulture, new landscaped areas, including the East Garden between the Hirshhorn Museum Building and the Arts and Industries Building, will create a need for an extension of services, as will the landscaping associated with the Museum Support Center. This Office has also maintained the Victorian Horticulture and Floriculture Exhibition in the Arts and Industries Building. New efforts in exhibits, coupled with research and propagation efforts for special collections of rare and endangered floral species, will enhance the dimensions of the horticultural function in coming years.

The Office of International Activities will support arrangements for research programs being planned in cooperation with foreign scientific agencies and organizations and develop new programs to be carried out with similar organizations in the People's Republic of China.

Increases in appropriations available to the Smithsonian Institution Traveling Exhibition Service (SITES) are being planned for FY 1984-88 to help keep rental charges down for users of this popular service; to reduce the effects of inflation on production and transportation costs of traveling exhibits; and to strengthen the registrarial, education, and publication functions of the program. If appropriation increases are not realized, the impact will be felt in higher costs for users for participatory fees and transportation costs. In FY 1980, the Institution began planning for circulating a series of major exhibitions from abroad. Initial contracts have been made with several South American countries to encourage their use of SITES' offerings; interest has been shown in these prospects, and funding and environmental questions are now being examined in greater detail.

Encouraged by the successful launching of the international tour of the American Impressionist exhibition which opened in Paris in March 1982, SITES will organize an exhibition of American Art of the 20s and 30s to inaugurate a European tour. The exhibition to be selected from Smithsonian and other private collections will consist of sixty paintings by Henri, Glackens, Bellows, Hopper, and Marin, among others. A guest curator will be selected to work with SITES to develop the exhibition, choose the works and write the catalogue. The exhibition will travel to five European cities.

SITES is working with the United States Information Agency (formerly the International Communications Agency) to organize an East Asian tour of a selection from the Renwick Gallery's American Porcelain exhibition. Sixty imaginative and original works, ranging from the functional to the sculptural, were selected by SITES and Renwick staff to travel to Seoul, Singapore, Hong Kong, Manila, Jakarta, Kuala Lumpur, and Tokyo beginning in July of 1983.

As well as organizing exhibitions specifically for international tours, SITES has identified other exhibitions organized for American audiences which are available for international showings. These exhibitions are listed in Update under the logo "SITES Abroad".

The ability to attract a number of major offerings from foreign countries and institutions is limited by the lack of funds to pay for shipping reciprocal exhibitions abroad. The Institution will continue to explore ways of overcoming these obstacles in the years ahead.

Museum Programs Resource Growth

By FY 1988, Museum Programs resources may approach \$15,000,000 from present levels of \$10,000,000. Federal appropriations will account for most of the growth and be concentrated in the Conservation Analytical Laboratory activities related to research and conservation programs, the Traveling Exhibition Service, and for horticulture and library operations. Unrestricted trust fund support for traveling exhibitions is also projected to increase substantially during the planning period.

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 6 (1)

MUSEUM PROGRAMS	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
ASSISTANT SECRETARY FOR MUSEUM PROGRAMS														
FEDERAL SALARY & EXPENSES	6	277	7	316	7	334	7	334	77	334	7	334	7	334
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	12	0	5	0	5	0	2	0	2	0	2	0	2
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	20	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	11	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	6	320	7	321	7	339	7	336	77	336	7	336	7	336
OFFICE OF MUSEUM PROGRAMS														
FEDERAL SALARY & EXPENSES	11	324	9	315	9	332	10	372	10	387	10	404	11	427
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	4	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	27	0	47	0	55	0	66	0	71	0	76	0	81
-ALL OTHER	0	15	0	0	0	1	0	0	0	0	0	0	0	0
RESTRICTED	0	12	2	540	2	532	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	19	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	11	401	11	902	11	920	10	438	10	458	10	480	11	508
INTERNATIONAL ACTIVITIES														
FEDERAL SALARY & EXPENSES	5	147	5	185	5	192	5	192	5	192	5	192	5	192
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	1	0	1	0	1	0	1	0	1	0	1	0	1
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	5	148	5	186	5	193	5	193	5	193	5	193	5	193

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 6 (2)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
MUSEUM PROGRAMS														
OFFICE OF THE REGISTRAR														
FEDERAL SALARY & EXPENSES	4	132	2	89	2	93	5	182	5	182	5	182	5	182
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	4	132	2	89	2	93	5	182	5	182	5	182	5	182
CONSERVATION ANALYTICAL LABORATORY														
FEDERAL SALARY & EXPENSES	21	822	21	910	21	951	22	995	23	1021	25	1073	25	1093
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	21	822	21	910	21	951	22	995	23	1021	25	1073	25	1093
SMITHSONIAN INSTITUTION LIBRARIES														
FEDERAL SALARY & EXPENSES	99	3212	99	3725	99	3633	99	4819	100	5058	102	5307	103	6253
UNRESTRICTED GENERAL	8	229	8	220	8	246	8	258	8	271	8	284	8	298
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	1	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	16	0	59	0	8	0	9	0	10	0	11	0	12
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	107	3458	107	4004	107	3887	107	5086	108	5339	110	5602	111	6563

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 6 (3)

MUSEUM PROGRAMS	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
OFFICE OF EXHIBITS CENTRAL														
FEDERAL SALARY & EXPENSES	47	1407	45	1408	45	1467	47	1579	49	1642	52	1729	57	1831
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	28	0	5	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	-29	0	2	0	4	0	2	0	2	0	3	0	3
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	47	1406	45	1415	45	1471	47	1581	49	1644	52	1732	57	1834
TRAVELING EXHIBITION SERVICE														
FEDERAL SALARY & EXPENSES	6	279	6	276	6	292	12	769	15	869	18	944	18	954
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	20	1167	19	1164	21	1178	21	1198	22	1267	25	1397	25	1447
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	48	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	1	238	1	355	0	200	0	300	0	300	0	300	0	300
FEDERAL GRANTS & CONTRACTS	0	112	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	27	1844	26	1795	27	1670	33	2267	37	2436	43	2641	43	2701
SMITHSONIAN ARCHIVES														
FEDERAL SALARY & EXPENSES	13	453	13	473	13	495	13	543	14	571	15	594	15	604
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	2	42	2	48	2	52	2	55	2	58	2	61	2	64
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	15	495	15	521	15	547	15	598	16	629	17	655	17	668

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 6 (4)

MUSEUM PROGRAMS	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
NATIONAL MUSEUM ACT														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE														
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED														
FEDERAL GRANTS & CONTRACTS														
-SUBTOTAL	3	735	3	784	3	786	3	1000	3	1000	3	1000	33	1000
MUSEUM PROGRAMS-SUMMARY														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	215	7788	210	8431	210	8575	223	10785	301	11256	242	11759	279	12870
-PROGRAM & ADMINISTRATIVE	10	288	10	274	10	304	10	316	10	332	10	348	10	365
-AUXILIARY ACTIVITY	20	1167	19	1164	21	1178	21	1198	22	1267	25	1397	25	1447
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	55	0	52	0	55	0	66	0	71	0	76	0	81
-ALL OTHER	0	55	0	2	0	5	0	2	0	2	0	3	0	3
RESTRICTED	1	277	3	954	2	740	0	309	0	310	0	311	0	312
FEDERAL GRANTS & CONTRACTS	0	131	0	0	0	0	0	0	0	0	0	0	0	0
-TOTAL	246	9761	242	10927	243	10857	254	12676	333	13238	277	13894	314	15078

SPECIAL PROGRAMS

Special Programs include the Office of American and Folklife Studies, the International Environmental Science Program, Academic and Educational Programs (including the Office of Symposia and Seminars, the Office of Elementary and Secondary Education, and the Office of Fellowships and Grants); the Collections Management/Inventory Program; and the trust-funded Collections Acquisition, Scholarly studies, and Education Programs. This chapter also consolidates the equipping and operating requirements of the Museum Support Center for various Smithsonian organizations involved in its development. The resources associated with the International Environmental Science Program, the Fellowship Programs of the Institution, the Collections Management/Inventory Programs, and the trust-funded Collections Acquisition funds are generally available to all organizations of the Institution if they meet certain standards and selection procedures.

Current Resources and Support

These programs in FY 1982 had total operating support of approximately 9,500,000, excluding excess foreign currencies which amount to the equivalent of \$4,320,000 in FY 1982.

A breakdown follows:

<u>Source of Funds</u>	<u>FY 1982</u>	
	<u>Full-Time Employment</u>	<u>Funds (\$000s)</u>
Federal Salaries & Expenses	34	\$7,637
Unrestricted trust	13	1,413
Restricted trust	-	149
Federal Grants & Contracts	<u>4</u>	<u>339</u>
Total	51	\$9,538

Funding patterns vary, and include programs which are funded entirely from federal appropriations to those funded solely through trust operations of the Institution. American and Folklife Studies, administered by the Assistant Secretary for History and Art, operates with both federal appropriations and trust funds and also seeks grants and contracts for special projects. Federal funds support three members of the folklife administrative staff as well as office expenses; travel expenses; research and publication efforts; two-thirds of the cost associated with the annual folklife festival; and special projects such as the Renwick exhibition,

Celebration: A World of Art and Ritual, and the FDR Centennial program, Folk Music in the Roosevelt White House. Trust funds support the salaries of the remaining nine permanent staff members, one-third the cost of the annual festival, and some travel and office expenses. Grants and contracts are sought to augment programs at the annual festival (e.g., the Oklahoma and Korean programs at the 1982 festival) and to initiate special projects (e.g., the cost of the St. Patrick's Day festivities for the opening of Celebration).

Trust funds cover the direct costs of the Visiting Research Fellowships, the recently established Regent's Fellowships, the Cooperative Education Program, and the James E. Webb Fellowship program. Administrative costs for the Office of Fellowships and Grants, the office which manages these programs, are essentially federally funded. In addition to administering the Institution's entire range of fellowship offerings, the Office of Fellowships and Grants also manages, for the Assistant Secretary for Science, the Special Foreign Currency Program.

The Office of Elementary and Secondary Education conducts its activities through federal appropriations, with only occasional trust funds or grants received for support of special projects, meetings or conferences. The Office of Symposia and Seminars receives an annual allotment from trust funds for administration and direction of its activities, which include seeking outside support for the academic and intellectual conferences which it coordinates. Both offices are administered by the Office of Public Service.

The International Environmental Research Program was established in the early 1970s to promote interbureau research on environmental matters by funding special, long-term projects using the principal scientific strengths of such organizations as the Tropical Research Institute, Chesapeake Bay Center, Radiation Biology Laboratory, Natural History Museum, and the Zoo. These funds are federally appropriated and administered by the Assistant Secretary for Science.

Collections Management/Inventory Programs. In FY 1979, Congress appropriated special funds in the amount of \$500,000 to help allow the Institution to begin conducting a major inventory of its various collections, including those which are to be housed in the Museum Support Center. These funds in FY 1983 amount to \$798,000 and are planned to be allocated to the Museum of Natural History, Museum of American History, the Cooper-Hewitt, and the Offices of Information Resource Management and Registrar to permit these units to initiate or continue important projects associated with the overall effort. Descriptions of the bureaus' activities under way are contained in the appropriate chapters; an initial breakdown of the FY 1983 amount follows:

	<u>FY 1983 Estimated</u>
Museum of Natural History	\$400,000
Museum of American History	271,000
Cooper-Hewitt Museum	71,000
Office of Information	
Resource Management	55,000
Office of the Registrar	<u>1,000</u>
Total	\$798,000

The funds are administered by the Assistant Secretary for Museum Programs, working in close consultation with the Assistant Secretaries for Science and History and Art to assure that from year-to-year the most urgent projects are selected for funding through this appropriation.

Collections Acquisition, Scholarly Studies, and Education Programs. In FY 1978, the Regents established a special trust account to be used for strengthening the Smithsonian's collections through purchase of major works of art and objects of scientific and historical value, and to allow for the funding of special projects important to the research and educational functions of the Institution. A total of \$12,000,000 (including a special reserve set aside for purchase of the Gilbert Stuart portraits of George and Martha Washington) in unrestricted trust funds was approved by the Regents for allocation to bureaus through FY 1982: \$2,500,000 for scholarly projects, \$2,500,000 for educational activities, and \$7,000,000 for collections acquisitions.

These funds, along with about \$200,000 that had been earmarked in earlier years for similar purposes, have made possible important activities in various museums and other bureaus of the Institution, including major acquisitions for the Hirshhorn Museum and Sculpture Garden, the Portrait Gallery, the Museum of American Art, the Freer Gallery of Art, the Cooper-Hewitt Museum, and the Museums of Natural History, American History and African Art. The funds have also supported major scientific studies and educational efforts, scientific workshops and conferences, student intern programs, Native American training programs, presentations, programs and performances for special groups including the handicapped and the elderly, and weekend films and lectures for the general public. It is anticipated, given available funds, that these Regents' programs will continue for a second five-year period, which began with FY 1983.

Museum Support Center Equipment and Operations. Appropriations are being used to purchase the specialized storage and laboratory equipment necessary for outfitting the building under construction at Suitland, Maryland. The storage system selected for purchase and installation at the Center provides efficient high-density storage on three eight-foot-high storage levels, similar to multi-story library stacks. The system uses fixed, self-supporting metal racks and cabinets that can hold a variety of cases, shelves and drawers as needed to meet the specific requirements of each of the collections. To help fund the equipment requirements, the

Institution is using about \$750,000 in trust funds for specialized conservation equipment over the planning period, and in future years will redirect rental funds presently used for the Oceanographic Sorting Center which will be housed in the Center.

Appropriations of \$2,711,000 and \$4,315,000, including \$400,000 in base funds from the Museum of Natural History, were made in FY 1981 and FY 1982 respectively for the purchase of specialized storage and laboratory equipment for the Center. In September 1982, a contract was awarded by the General Services Administration for the first increment of storage equipment for the "wet collections" of the Oceanographic Sorting Center and the Museum of Natural History. Final shop drawings were prepared in late 1982 and fabrication and installation of this equipment will proceed through half of 1983. Bids for storage equipment for other collections will be solicited early in 1983.

The FY 1983 appropriation provides \$3,820,000 for continued purchase of storage and operational equipment: \$1,100,000 for expenses for moving specimens and artifacts from museums and laboratories to the Center; \$772,000 for utility costs; and \$1,015,000 for 36 full-time positions and other support costs, including custodial, maintenance, security, and program operations. The Institution is currently examining means by which an additional number of essential positions can be provided by the Institution for the first year of operation. Alternatives include reprogramming existing positions and contracting for security and maintenance functions, either on the Mall or at the Center.

For FY 1984, the Institution is seeking a consolidated appropriation of \$8,456,000, including \$3,895,000 for additional increments of the specialized equipment and the completion of the acquisition program for laboratory and related operational equipment, \$772,000 for utilities, \$750,000 for moving expenses, and 80 positions and \$3,032,000 to operate the Support Center at an effective level. Approval of these positions will provide essential security, maintenance, and equipment operations, as well as conservation and training functions for which the building is being constructed.

Major Exhibition Program. Appropriations of \$750,000 were received for this program for the first time in FY 1981. Prior to and during the Bicentennial Year, the Institution maintained a similar separate major exhibitions program funded by Congress for specific, carefully selected exhibitions whose costs were over and beyond that which could be financed by normal base operations. Following the Bicentennial Year, however, this program was phased out and its funding rejustified and redirected to other programs.

This more recent appropriation serves a like purpose, to revitalize various exhibitions programs (especially at the Museum of American History) and to permit more joint exhibits activity among History and Art museums. It will be maintained as a separate account as long as it is considered to

be meeting the exhibits goals of the Institution in a timely and appropriate manner. The fund is managed by the Assistant Secretary for History and Art.

Future Year Prospectus

Trust support for Special Programs is contingent in future years on economic conditions, institutional priorities, and the abilities of the various auxiliary and revenue producing activities to sustain their popularity and financial performance. As stated, over the years some slight increase in funding is expected for the Collections Acquisition, Scholarly Studies, and Education Programs to allow for gradual growth in activities.

The Office of Folklife Programs will continue to plan and produce the annual Festival of American Folklife, which takes place during the two-week period at the end of June and over the July 4th holiday weekend. The festival will continue to be co-sponsored by the National Park Service. In the summer of 1982, the festival returned to its original site on the Mall, outside the Museums of American History and Natural History.

This office will also continue its research and publication efforts, including the publishing of scholarly monographs on aspects of American culture (these monographs are accompanied by documentary films which visually explicate technical aspects of the written treatises and are distributed through Pennsylvania State University) and mount special projects within the museums such as the monthly "living celebrations" planned for the Renwick Gallery in FY 1983 as part of the "Celebration" exhibition.

Stable funding is projected for the Office of Symposia and Seminars. Funds for the special program for inventorying the Institution's collections are expected to remain at about present levels of \$800,000. This will allow the Institution to maintain its inventory work in future years.

No major growth of federal projects or resources is planned for the Office of Elementary and Secondary Education, but some expansion of trust supported programs may occur. A series of anthropology resource kits for use in elementary and secondary schools is being planned which may be adapted later for various other subjects in art, history, and science. Some additional workshops, the completion of a special project directed toward producing learning materials for hospitalized children, expanded programs for handicapped visitors, and a program designed to introduce minority young people to career opportunities at the Smithsonian also are being planned. Ways to fund these activities through grants and contracts or through the Institution's earmarked educational trust funds are being considered.

Some additional federal resources will be necessary during the planning period for the Office of Fellowships and Grants to administer fellowships, internships, and the Special Foreign Currency Program; and

increases are projected from trust funds for increasing the variety, numbers, and stipend levels of fellowship awards. The Office of Fellowships and Grants currently administers the Pre- and Postdoctoral Fellowship Program, the Cooperative Education Program, Short-Term Visitor Program, Regents' and Senior Fellowship Program, Visiting Scientist and Scholar Program, the new James E. Webb Fellowships for management training, and academic internships which carry financial support.

Until FY 1979, the Institution's Fellowships Awards were supported principally with appropriated funds, but since then have been supported principally with nonappropriated unrestricted trust funds. This change is a consequence of the Regents' decision to apply trust funds to certain federal services. Approximately fifty full-year fellowships are now offered annually by the Office of Fellowships and Grants for doctoral candidates or recent recipients of the doctorate to receive advanced research training under the guidance of Smithsonian senior scholars. The Pre - and Postdoctoral Fellowship Program is widely endorsed by the Smithsonian staff. Concerted effort will be made during the planning period to increase the number of fellowships awarded via a variety of sources. A planned increase in the Fellowship Program will allow many more excellent scholars to utilize the Smithsonian and to interact with the professional staff. It will also enable worthy candidates from countries with which we would like to establish ties, and which cannot currently compete, to join our scholarly community. Increased funding in FY 1982 covered some of the planned growth and further increases are expected for the planning period. The Institution will also continue to try to establish stipend-level increases which take into account inflation and competitive changes.

The Regents' Fellowships are highly selective awards to scholars of distinction and breadth of intellect to pursue in-residence studies related to Smithsonian research. They devote themselves to timely and important topics in their disciplines and are expected to publish major contributions to knowledge as a result, in part, of their Smithsonian work. The interaction with predoctoral, postdoctoral and fully established colleagues adds significantly to the intellectual climate of the Institution. Only small increases necessary for inflation are projected for the future.

In spring 1982, the Regents established a fellowship to honor Regent Emeritus James E. Webb. Aimed at developing future leaders for the management of cultural and scientific institutions, the fellowships (up to five per year) are available to employees of other organizations and to graduate students in U.S. university management programs for the periods of training at the Smithsonian Institution and to Institution employees for training in universities or at other organizations.

The Cooperative Education Program was established recently, and offers minority internships and faculty fellowships. This program is one of the means by which the Smithsonian is attempting to increase the representation of minority groups in its educational and research programs and ultimately in its professional ranks. The immediate goal is to attract minority men and women, with emphasis on people from historically Black colleges. The program offerings are designed to enhance student and faculty scholarship

and also create a greater awareness and understanding of Smithsonian opportunities at the students' home colleges. Since its inception in summer 1981, 35 internships and seven faculty fellowships have been awarded.

The Office of Fellowships and Grants also administers the Special Foreign Currency Program (SFCP) the central activity of which is a competitive grants program providing support for research for scholars from U.S. institutions, including the Smithsonian, in the excess currency countries. These grants are a major source of funding for American scholarship in a broad range of disciplines from archeology to zoology. Also, international publications of priority interest to scholars are translated in India and Pakistan using "excess" currencies. In fiscal year 1981, more than 70 projects received Smithsonian support. The last obligations of excess Egyptian pounds were made in FY 1981 and some 15 projects will continue activities in Egypt, for between 1 to 3 years, under multiyear grants. For FY 1984 \$4,000,000 equivalent in excess currency is being requested for the grants program. This level is considered optimum for continuing ongoing projects and encouraging new work in the excess currency countries. This amount will also allow for some multiyear funding of continuing projects to provide stability for the planning of long-range (3 to 5 years) programs. The SFCP will continue to request funds in this range for the next five years. The major activity will be in India. Because the excess Indian accounts will be drawn down in the next 5 to 7 years, it is essential that the grants program be funded at the optimum level to take advantage of the time-limited opportunity for research in that country.

In addition to the grants program, periodic increases of excess currencies have been sought for important and timely projects. One such project has been to establish a reserve fund in Indian rupees for long-term support of the American Institution for Indian Studies (AIIS), a consortium of American universities and museums, whose members have sustained research interests in India. Another special project begun in FY 1982 is funding for the international salvage effort to preserve the ancient urban site at Moenjodaro in Pakistan. These efforts continue to be long-range interests of the Institution and funding will be sought over the next five years to carry them out. In 1984, \$4,000,000 equivalent is being requested for the AIIS forward fund and \$1,040,000 equivalent is requested for the Moenjodaro project.

International Environmental Science Program. Increased federal appropriations will be sought in future years for the International Environmental Science Program. This program contributes substantially to institutional research progress, and continues to be considered a high-priority effort. Environmental monitoring is pursued at two permanent Smithsonian sites--the Chesapeake Bay Center and the Tropical Research Institute--and at several temporary sites. Over the next five years, an effort will be made to strengthen the research work at these sites to monitor changes in the natural environment and to stay abreast of biological conservation affairs. Based on an outside review, the Institution is conducting long-term environmental monitoring as an activity which matches the

basic aims and purposes of the Institution's research programs. Increased funding will allow emphasis to be placed on defined parameters of watershed monitoring, productivity studies of the tropical forests, and on changes in marine indicators at the permanent stations. Over the planning period, monitoring at several nonpermanent sites may be completed and base resources would then be reapplied to new sites. Efforts will continue over the planning period on several environmental questions in the Llanos region of Venezuela, and continued efforts will be made to implement fully studies in the People's Republic of China. In addition, more intensive work will be undertaken on the biogeography of the Amazon region of Latin America. New studies in FY 1983 will focus on environmental aspects of Aldabra atoll in the Pacific atoll in the Pacific Ocean and on the reintroduction and subsequent monitoring of the highly endangered golden lion tamarin in the Poco d'Ante Reserve in southeastern Brazil. More resources will be sought over the period for data analyses, travel, publication, and support costs.

Museum Support Center Equipment and Operations. Equipment appropriations are expected to be \$3,895,000 in FY 1984, \$3,000,000 in FY 1985 and FY 1986, and then begin to decline following the initial move to the Center to a relatively stable level of approximately \$2,500,000. Future year annual operating and program expenses are expected to grow to about \$5,200,000 by FY 1987, about two-thirds of which will be required for plant operation and maintenance and repairs, utilities, protection services, and grounds maintenance. About one-third will be required to staff and operate the Conservation Training Center and the collections work associated with the Museums of Natural History and of American History.

Major Exhibitions. This program has supported the successful development of two large exhibitions, one commemorating the 250th anniversary of George Washington's birth (at the Museum of American History) and one focusing on cultural celebrations and collections of folklife materials drawn from all of our museums (at the Renwick Gallery), both of which opened in FY 1982. Forthcoming exhibitions include major reworkings of displays of American cultural history, science and technology at the Museum of American History; celebration of the 10th anniversary of the opening of the Cooper-Hewitt Museum; a comprehensive retrospective of the ancient history of the Holy Land at the Museum of Natural History's Evans Gallery; and the presentation of folk crafts from India. Measured growth in the planning period will sustain an active and effective series of important displays which would otherwise be unavailable to the public.

Special Programs Resource Growth

Substantial growth in federal funding is required for Museum Support Center operations over the next few years, most of which is being sought in FY 1984. A decline is currently projected in future years from the high levels of Museum Support Center equipment appropriations needed during FY 1982-84. Some increases over the next few years are projected to continue to strengthen Folklife, International Environmental Science, and the Major Exhibitions Programs. Additional trust support is projected for the Fellowship, Collections Acquisition, Scholarly Studies, and Education Programs.

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 7 (1)

SPECIAL PROGRAMS	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
AMERICAN STUDIES & FOLKLIKE PROGRAM														
FEDERAL SALARY & EXPENSES	5	619	5	616	5	650	5	690	5	770	5	825	5	840
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	11	513	9	450	10	453	11	453	11	428	11	428	11	403
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	4	0	13	0	9	0	10	0	10	0	10	0	10
-ALL OTHER	0	35	0	29	0	27	0	24	0	24	0	24	0	24
RESTRICTED	0	32	0	3	0	5	0	2	0	2	0	2	0	2
FEDERAL GRANTS & CONTRACTS	4	324	0	100	0	100	0	100	0	100	0	100	0	100
-SUBTOTAL	20	1527	14	1211	15	1244	16	1279	16	1334	16	1389	16	1379
OFC OF ELEMENTARY & SECONDARY EDUCATION														
FEDERAL SALARY & EXPENSES	7	186	7	261	7	302	7	325	7	325	7	325	7	325
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	25	0	30	0	31	0	33	0	35	0	37	0	39
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	1	0	0	0	0	0	1	0	1	0	1	0	1
-ALL OTHER	0	8	0	2	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	23	0	71	0	54	0	63	0	65	0	68	0	70
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	7	243	7	384	7	387	7	422	7	426	7	431	7	435
OFFICE OF SYMPOSIA & SEMINARS														
FEDERAL SALARY & EXPENSES	3	80	3	87	3	93	3	93	3	93	3	93	3	93
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	1	103	1	93	1	95	1	98	1	103	1	103	1	108
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	17	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	78	0	24	0	70	0	40	0	40	0	50	0	50
FEDERAL GRANTS & CONTRACTS	0	15	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	4	293	4	204	4	258	4	231	4	236	4	246	4	251

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 7 (2)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
SPECIAL PROGRAMS														
OFFICE OF FELLOWSHIPS & GRANTS														
FEDERAL SALARY & EXPENSES	9	265	9	311	9	322	9	349	9	359	9	364	9	369
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	1	39	1	45	1	42	1	44	1	46	1	48	1	50
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	581	0	806	0	886	0	975	0	1325	0	1425	0	1525
RESTRICTED	0	16	0	16	0	20	0	20	0	20	0	20	0	20
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	10	901	10	1178	10	1270	10	1388	10	1750	10	1857	10	1964
REGENT'S FELLOWSHIPS														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	86	0	120	0	120	0	130	0	130	0	140	0	140
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	0	86	0	120	0	120	0	130	0	130	0	140	0	140
INTERNAT'L ENVIRONMENTAL SCIENCE PROGRAM														
FEDERAL SALARY & EXPENSES	2	526	2	647	2	678	2	718	2	758	2	798	2	838
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	2	526	2	647	2	678	2	718	2	758	2	798	2	838

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 7 (3)

SPECIAL PROGRAMS	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
COLLECTIONS MANAGEMENT/INVENTORY PROGRAM														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	0	733	0	798	0	827	0	827	0	827	0	827	0	827
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SU8TOTAL	0	733	0	798	0	827	0	827	0	827	0	827	0	827
CARE, FLUID RSCH., SMITHSON AWARDS *														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	2575	0	2600	0	2600	0	2600	0	2600	0	2900
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SU8TOTAL	0	0	0	2575	0	2600	0	2600	0	2600	0	2600	0	2900
MUSEUM SUPPORT CENTER EQUIP./OPERATIONS														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	8	4510	36	6709	116	8456	140	8431	143	7906	144	7551	145	7706
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	1	0	250	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SU8TOTAL	8	4511	36	6959	116	8456	140	8431	143	7906	144	7551	145	7706

* FY 1982 expenditures for this special program were incurred by various bureaus and are included in their expenditures.

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 7 (4)

SPECIAL PROGRAMS	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
MAJOR EXHIBITION PROGRAM														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	0	718	0	841	0	885	0	945	0	995	0	1045	0	1095
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	0	718	0	841	0	885	0	945	0	995	0	1045	0	1095
JOHN F KENNEDY CENTER TRUSTEE GRANT														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	0	0	0	1000	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	0	0	0	1000	0	0	0	0	0	0	0	0	0	0
SPECIAL PROGRAMS-SUMMARY														
FEDERAL SALARY & EXPENSES	34	7637	62	11290	142	12213	166	12378	169	12033	170	11828	171	12093
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	13	680	11	618	12	621	13	628	13	612	13	616	13	600
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	5	0	13	0	9	0	11	0	11	0	11	0	11
-ALL OTHER	0	728	0	3782	0	3633	0	3729	0	4079	0	4189	0	4589
RESTRICTED	0	149	0	114	0	149	0	125	0	127	0	140	0	142
FEDERAL GRANTS & CONTRACTS	4	339	0	100	0	100	0	100	0	100	0	100	0	100
-TOTAL	51	9538	73	15917	154	16725	179	16971	182	16962	183	16884	184	17535

NOTE: Foreign currency appropriation in FY 1982 was \$4,320,000, FY 1983 - \$2,000,000, FY 1984 - \$9,040,000, FY 1985 and FY 1986 - \$9,000,000, FY 1987 and FY 1988 - \$8,000,000.

ASSOCIATES PROGRAMS

Founded in 1965 on the 200th birthday of James Smithson, the original Associates Program was designed especially for residents of the Washington metropolitan area, drawing on the varied resources of the Institution to provide educational and cultural opportunities to individuals or families who chose to join. The larger institutional aims in public education, however, have always been to make Smithsonian resources increasingly accessible to people of all ages and without regard to their geographic distance from the National Mall. With the establishment of the Smithsonian magazine in April 1970 as a major benefit and feature of a membership program, the original Smithsonian Associate Program has evolved now to include separate National and Resident organizations which offer educational and learning experiences geared to public constituencies in the Washington area, as well as across the country.

This chapter covers recent performances, plans, changes in activities, and resource estimates for Associates programs, including the National and Resident Associate Programs, the Office of Membership and Development which coordinates these programs, and the Magazine which is part of the Office of Public Service.

Current Resources and Support

These trust-funded operations had FY 1982 auxiliary activity revenues totaling approximately \$56,800,000 and 159 employees. Minor amounts were also available from special purpose funds and restricted gifts and grants. As a group, they generated more than \$7,600,000 in unrestricted trust income for the Institution in FY 1982 after cost of sales, payroll, and other operating expenses. Gross expenses for unrestricted trust auxiliary operations amounted to about \$49,200,000.

Unrestricted income and expenses for FY 1982 are summarized below:

	FY 1982 Full-Time <u>Employment</u>	FY 1982 Unrestricted Funds <u>(\$000)</u>
INCOME:		
Office of Membership and Development		\$ -
Resident Associates		2,496
National Associates		8,612
Magazine		45,686
Total		<u>\$56,794</u>

EXPENSES:

Office of Membership and Development	12	\$ 499
Resident Associates	40	2,424
National Associates	25	8,048
Magazine	82	38,196
Total	159	\$49,167

Net Gain: \$ 7,627

The Resident Associate Program offers a variety of popular classes, lectures, tours, and other activities for members in the metropolitan Washington area. It has been self-supporting since 1972, generating modest net funds each year which are budgeted with unrestricted funds of the Institution.

Elements of the National Associate Program are the educational travel services, the contributing membership program, the regional events program, and the selected studies seminars. The National Associate Program is not expected to produce net income except for the travel and contributing membership programs.

The fund-raising and administrative costs of the Office of Membership and Development are considered as an expense item against unrestricted funds. Contributions to the Smithsonian from corporations, foundations and individuals approximated \$3,500,000 in FY 1982. This figure does not include the contributing membership program, contributions from the members of the James Smithson Society, or contributions toward the Quadrangle project or other construction and renovation programs.

The Magazine has been one of the most successful public education ventures established by the Institution. Its general acceptance is a tribute to the role it has played in filling a need for style and elegance, as well as lucid reporting on cultural and scientific developments taking place in today's world. The largest portion of the resources for this group of activities is contained within the operations of the Magazine. In FY 1982, expenses of this trust funded activity were approximately \$38,000,000, and the Institution realized net funds of about \$7,500,000. The net funds will continue to fund various educational program operations of the Institution.

Future Year Prospectus

Resident Associate Program. Membership, now at 54,000 in metropolitan Washington, is down from 55,000 in FY 1981, with a current retention rate of about 76 percent, as compared to 80 percent in FY 1980 and in FY 1981. The current biennial random sampling membership survey indicates that about 92 percent of the present membership intends to renew, so it is hoped that this figure, combined with contemplated limited promotion, will return membership to the 55,000 level by FY 1988-89. The Resident Associate Program will continue to organize education and membership activities

including courses, seminars, lectures, film series, and study tours for adults and young people and to commission original works of art.

For the coming year, the Program is undertaking some new activities that will reach broader audiences. Teleconferencing an annual seminar to a national higher education audience is being planned, and the use of other new sophisticated communications technologies is being considered. Due to the success of the 1982 collaboration with the American Institute of Architects on an architectural design seminar, future similar efforts are planned for FY 1983. In addition, in spring 1983, a Resident Associate seminar on architecture and energy funded by AIA as part of a national project is scheduled. Also, because of the success of the 1982 AIA project, the Resident Associate Program is considering a similar proposal from the American Society of Interior Designers.

In the area of membership, the staff is taking a new look at the composition of its membership based on results from the 1982 biennial membership questionnaire. An effort is being made to attract more black and other minority group members. Also, beginning in spring 1983, a Tuesday-morning lecture series is being initiated to strengthen services to senior citizens.

National Associate Program. Travel, regional events, selected studies and contributing membership activities will continue as a way for National members to participate in the life of the Institution without regard to their geographical location. It is difficult to project the rate of growth for foreign and domestic study tours since demand for tours is related to members' disposable incomes and expenses, including future energy costs. Currently, demand for the educational tours is strong and this trend is expected to continue through 1983. As in the past, airline co-sponsorship will be sought to alleviate the problem of higher air fare for staff traveling in conjunction with the regional events outreach activities. Nearly two million households will have received invitations to experience this popular program in 90 different cities by 1988. Based on current heavy enrollment, the number of National members coming to Washington for the five-day selected studies seminars is expected to increase at a modest rate despite higher transportation costs. The growth will result from the use of Smithsonian facilities located off the Mall and to increased numbers of participants in appropriate seminars. The contributing membership is expected to grow at a most favorable rate. Several successful promotion techniques have been developed which should continue to produce encouraging results.

The Development Office will continue to respond to the various project or acquisition needs of the bureaus while, at the same time, seeking construction funds for the Quadrangle from Asian, Middle Eastern and African nations, as well as from U.S. corporations, foundations and individuals. To meet the requirements of the Quadrangle, the office Director has been working closely with the representative of Brakeley, John Price Jones, a firm engaged to help with the fund-raising efforts.

The cutback in federal support for culture and the arts is resulting in far keener competition across the nation for private support. As a result, there have been two test mailings in a direct mail campaign to encourage planned giving to the Smithsonian through charitable remainder trusts, and in FY 1983 a new development brochure will be prepared.

In the absence of a successful government policy encouraging corporate and individual economic progress, it can be expected that gifts and grants to the Institution will become increasingly difficult to achieve, particularly in the corporate area, where competition for local community support as well as national demands is very intense.

Smithsonian Magazine. Although the Magazine's management is justifiably cautious about the ebb and flow of fashion in publishing, it also expects that the demand for its product will remain strong, with an annual financial surplus estimated at \$6,000,000 to \$7,000,000 over the next few years. It is primarily from these funds that the Board of Regents has been able to budget for the \$2,000,000 to \$2,500,000 program for acquisitions, scholarly studies and educational outreach projects, to fund certain expenses previously met with federal appropriations, and to set aside sums each year for the enhancement of the Institution's endowment. The Magazine will continue to produce a high quality product and to be supported entirely by the trust revenues which it generates. New growth in subscribers is expected to average 25,000 a year from the present level of about 1,900,000. If required because of inflationary cost increases associated with production and mailing, subscription rates may increase in future years.

Associates Programs Resource Growth

Unrestricted trust operations for this group of activities are expected to increase from present levels of revenues generated by about \$32,000,000 and expenses are projected to increase about \$31,000,000. The resulting growth over FY 1982 in the net funds expected to be available for application to various activities and programs of the Institution is about \$1,000,000.

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 8 (1)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
ASSOCIATES PROGRAMS														
OFFICE OF MEMBERSHIP & DEVELOPMENT														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL	12	499	13	681	11	384	11	403	11	423	11	444	11	466
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	0	11	0	10	0	11	0	11	0	12	0	12	0	12
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	12	510	13	691	11	395	11	414	11	435	11	456	11	478
SMITHSONIAN MAGAZINE														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	82	38196	86	43079	86	46411	88	50266	88	54725	88	58417	88	63165
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	82	38196	86	43079	86	46411	88	50266	88	54725	88	58417	88	63165
NATIONAL ASSOCIATES PROGRAM														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	25	8048	25	9262	26	10422	27	11136	28	11888	28	12668	29	13512
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	25	8048	25	9262	26	10422	27	11136	28	11888	28	12668	29	13512

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 8 (2)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
ASSOCIATES PROGRAMS														
RESIDENT ASSOCIATES PROGRAM														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	40	2424	40	2472	40	2615	42	2746	44	2882	45	3024	46	3174
-AUXILIARY ACTIVITY														
UNRESTRICTED SPECIAL PURPOSE	0	4	0	0	0	0	0	0	0	0	0	0	0	0
-BUREAU ACTIVITY	0	9	0	2	0	2	0	2	0	2	0	2	0	2
-ALL OTHER	0	35	0	14	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS														
-SUBTOTAL	40	2472	40	2488	40	2617	42	2748	44	2884	45	3026	46	3176
ASSOCIATES PROGRAMS-SUMMARY														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL	12	499	13	681	11	384	11	403	11	423	11	444	11	466
-PROGRAM & ADMINISTRATIVE	147	48668	151	54813	152	59448	157	64148	160	69495	161	74109	163	79851
-AUXILIARY ACTIVITY														
UNRESTRICTED SPECIAL PURPOSE	0	15	0	10	0	11	0	11	0	12	0	12	0	12
-BUREAU ACTIVITY	0	9	0	2	0	2	0	2	0	2	0	2	0	2
-ALL OTHER	0	35	0	14	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS														
-TOTAL	159	49226	164	55520	163	59845	168	64564	171	69932	172	74567	174	80331

BUSINESS MANAGEMENT ACTIVITIES

This section covers plans, anticipated changes, and resource estimates for selected auxiliary activities conducted under the auspices of the Business Management Office. These revenue producing activities include the Museum Shops, Mail Order Division, Concessions, Parking, Food Services, and the Belmont Conference Center. The revenue-producing activities of the Division of Performing Arts, Smithsonian Press, and Traveling Exhibition Service are separate from the Business Management Office, and are presented in appropriate chapters and tables corresponding to the organization of the Institution and the FY 1984 budget submission to Congress.

The operations described in this section, like the Institution's Associates Programs, are an effort to offer the public a diverse range of services, to make the Smithsonian more accessible, and to enhance the educational experiences generated by exhibits and other activities.

Current Resources and Support

In FY 1982, these trust-funded operations had revenues totaling some \$23,600,000 and 263 employees. As a group they generated approximately \$2,040,000 in unrestricted net income for the Institution in FY 1982 after cost of sales, payroll, and other operating expenses. Unrestricted income and expenses for FY 1982 are summarized below:

	FY-1982 Full-Time <u>Employment</u>	FY 1982 Unrestricted Funds <u>(\$000s)</u>
INCOME:		
Business Management Office		\$ -
Museum Shops		9,531
Mail Order Division		8,799
Concessions		905
Food Services		3,107
Parking		921
Belmont		363
Total		<u>\$23,626</u>

EXPENSES:

Business Management Office	5	\$ 232
Museum Shops	141	8,911
Mail Order Division	40	8,563
Concessions	-	39
Food Services	53	2,930
Parking	17	451
Belmont	7	453
Total	263	\$21,579

Net Gain: \$ 2,047

Museum Shops. The Smithsonian has provided sales desks since the 1860s, but substantial sales results are a recent development. Centrally managed museum shops are located in the Museum of American History, the Museum of Natural History, the Arts and Industries Building, the Air and Space Museum, the Hirshhorn Museum and Sculpture Garden, the Museum of American Art, the Portrait Gallery, the Renwick Gallery, and the Museum of African Art.

Items offered for sale in the museum shops are selected to meet special requirements. Each item must expand the educational value of an individual's visit, relate to the collections, be appropriate to the museum where sold, and conform to high standards of quality and taste. Catalogues and other publications derived from exhibition themes and subjects, including works by Smithsonian scholars, are important to the museum shops. Other items include reproductions of artifacts, craft products, and educational games and toys for children.

Mail Order Division. Formed in 1975, the mail order division produces several catalogues each year. These catalogues are sent to Associates and offer special items selected to reflect Smithsonian collections and programs. High standards of quality, taste, and educational value are maintained. Approximately 225,000 catalogue orders are processed annually through the Division's receiving and shipping center in Springfield, Virginia .

Concessions. Through concession arrangements, the Institution provides visitors with restaurant facilities and recorded tour rental systems in the major Smithsonian museums. An old fashioned ice cream parlor is also operated by a concessionaire in the Museum of American History. Other concessions include the popular carousel and popcorn wagons on the Mall during the spring and summer.

Parking. Parking revenues are generated by the parking garage located under the Air and Space Museum and supplemented by fees charged to Associates and the public parking on other Smithsonian lots during weekends.

Belmont Conference Center. The Center, which opened in 1967, is located between Washington and Baltimore and is operated by the Smithsonian

to provide a setting for scholarly conferences and related gatherings both for its own activities and for other nonprofit and governmental organizations and institutions. The limited size of this facility has necessitated in years past an operating subsidy of approximately \$50,000 to \$100,000 per year.

Food Services. In order to have more direct control over the quality of food services offered the public, during FY 1982 the Smithsonian converted two of its concessionaire-managed food facilities (at the Air and Space Museum and the Hirshhorn Museum and Sculpture Garden) to self-operation.

Future Year Prospectus

Museum Shops. Sales should continue to grow at a modest rate even though there is little opportunity or room for spatial expansion without affecting museum operations. The recent and dramatic increase in the size of the shops' operations requires strengthening and perfecting existing systems. Installation of a computerized retail system is contemplated, as well as a new museum shop at the Museum of American History.

Mail Order Division. In FY 1982, the division showed a significant increase in available income over expenses. Improvements in product selection, catalogue production, marketing systems and automated order processing should continue to have a positive effect in future years.

Concessions. Concession income is expected to grow moderately and in accord with institutional visitation.

Parking. Parking revenues will increase in the next two years because of scheduled rate increases and because of Associates and public weekend paid parking in lots other than the Air and Space Museum. The longer-range outlook is difficult to project given unpredictable energy availability and changing modes of visitor transportation.

Belmont Conference Center. The Institution will discontinue operating this activity in FY 1983. A large tract of the Center's land has been sold to the State of Maryland for use in conjunction with Patapsco State Park, and the American Chemical Society has purchased the house, outbuildings, and a small amount of the surrounding area subject to restrictive covenants. The Society plans to continue to operate Belmont as a conference facility.

Food Services. Plans to take over additional Smithsonian food operations are being held in abeyance so that efforts can be concentrated on existing outlets.

Business Management Activities Resource Growth

By FY 1988 unrestricted trust operations for this group of activities are expected to increase from present levels of revenues generated by over \$16,000,000 and expenses are projected to increase over \$15,000,000. The resulting growth over FY 1982 in the net income expected to be available for application to various activities and programs of the Institution is about \$1,000,000.

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 9 (1)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
BUSINESS MANAGEMENT														
BUSINESS MANAGEMENT OFFICE														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PRDGRAM & ADMINISTRATIVE	5	232	5	276	5	300	5	320	5	340	5	360	5	380
-AUXILIARY ACTIVITY														
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	5	232	5	276	5	300	5	320	5	340	5	360	5	380
MUSEUM SHOPS														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PRDGRAM & ADMINISTRATIVE	141	8911	141	9955	141	10450	141	10975	141	11500	141	12075	141	12650
-AUXILIARY ACTIVITY														
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	141	8911	141	9955	141	10450	141	10975	141	11500	141	12075	141	12650
MAIL ORDER DIVISION														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PRDGRAM & ADMINISTRATIVE	40	8563	40	8719	43	9600	43	10200	43	10650	43	11100	43	11550
-AUXILIARY ACTIVITY														
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	40	8563	40	8719	43	9600	43	10200	43	10650	43	11100	43	11550

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 9 (2)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
BUSINESS MANAGEMENT														
CONCESSIONS														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	0	39	0	69	0	62	0	34	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	0	39	0	69	0	62	0	34	0	0	0	0	0	0
FOOD SERVICE DIVISION														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	53	2930	54	3350	61	4034	102	6992	135	10640	135	11175	135	11735
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	53	2930	54	3350	61	4034	102	6992	135	10640	135	11175	135	11735
PARKING OPERATIONS														
FEDERAL SALARY & EXPENSES														
UNRESTRICTED GENERAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	17	451	17	456	17	475	17	498	17	520	17	550	17	575
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	17	451	17	456	17	475	17	498	17	520	17	550	17	575

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 9 (3)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
BUSINESS MANAGEMENT														
BELMONT CONFERENCE CENTER														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	7	453	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-SUBTOTAL	7	453	0	0	0	0	0	0	0	0	0	0	0	0
BUSINESS MANAGEMENT-SUMMARY														
FEDERAL SALARY & EXPENSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-AUXILIARY ACTIVITY	263	21579	257	22825	267	24921	308	29019	341	33650	341	35260	341	36890
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-TOTAL	263	21579	257	22825	267	24921	308	29019	341	33650	341	35260	341	36890

ADMINISTRATIVE, FINANCIAL, AND OTHER SUPPORT SERVICES

Central administrative, financial, and other support services provide overall planning, policy determination, direction, and leadership to the Institution; management of its resources; and evaluation of its work. These units furnish legal counsel, financial management, public information, and other administrative, professional, and technical services required to support the Smithsonian's programs, to maintain, operate, and protect its physical plant; to perform health and safety services; and to assure that the Institution complies with all appropriate laws and regulations and is fully accountable for its actions.

These units include the central management offices provided by the Offices of the Secretary, Under Secretary, Assistant Secretary for Administration, General Counsel, Treasurer, Coordinator of Public Information including Congressional Liaison, and Director of Facilities Services. They also include the following specialized administrative and technical offices: Accounting and Financial Services, Audits, Contracts, Equal Opportunity, Grants and Risk Management, Information Resource Management, Management Analysis, Personnel Administration, Printing and Photographic Services, Programming and Budget, Public Affairs and Special Events, Supply Services, and Travel Services. Also included is the International Exchange Service which has been transferred to the Assistant Secretary for Administration for review of its future operations.

Support services also consist of three major facilities offices: Design and Construction, Plant Services, and Protection, with primary orientation to the physical plant and its contents and to safety and health services for visitors and staff. To be consistent with budget presentations, resources associated with the Office of Horticulture and South Group Building Management are included in the tables of this chapter as part of physical plant services. These latter two organizations are supervised by the Assistant Secretary for Museum Programs.

Current Resources and Support

These organization units had FY 1982 resources totaling about \$55,000,000 (including \$12,000,000 for utility and communications costs) and 1,445 full-time employees. Of this total, approximately \$48,000,000 and 1,272 full-time employees are provided from appropriated funds and \$7,000,000 and 173 employees are allocated within the Institution's nonappropriated trust fund budget. A breakdown of resources (before application of overhead recovery) follows:

<u>Subgroups</u>	FY 1982			
	<u>Federal S&E</u>		<u>Trust Funds</u>	
	<u>Full-Time Employment</u>	<u>Funds (\$000s)</u>	<u>Full-Time Employment</u>	<u>Funds (\$000s)</u>
Central Management Offices	41	\$ 1,444	24	\$1,594
Specialized Administrative and Technical Offices	225	8,366	138	4,234
Facilities Offices	<u>1,004</u>	<u>38,053</u>	<u>13</u>	<u>1,275</u>
Total	1,270	\$47,863	175	\$7,103

Unrestricted trust funds are allotted to the management and support units to achieve an appropriate balance of federal appropriation and trust fund support in these units, since they serve the entire Institution. Primarily, these funds are used for personnel who perform assignments similar to those of staff paid from appropriated funds. Several support units administer unrestricted trust funds for more specialized purposes. The Office of Printing and Photographic Services receives income from the sale of photographic materials to the public. The computer center of the Office of Information Resource Management and the audiovisual unit of the Office of Plant Services operate on a cost recovery basis by charging users for the services provided.

Future Year Prospectus

Major emphases of the central management offices will be the realization of the Quadrangle project; the strengthening of the Institution's equal opportunity and affirmative action programs; and the supervision of the administrative and support functions to assure their responsiveness to the needs of the research, collections management, and public education functions. Continued strong attention will be given to legal oversight of and counseling on the Smithsonian's programs and improvement of financial management, accounting, monitoring, reporting, and auditing systems. Information concerning research, exhibitions, and other activities will be provided to the public in informative and interesting ways and the Office of Management and Budget and Congress will be kept advised of institutional programs and progress. Programs for building repairs, improvements and security and to employee and visitor health and safety will be sustained. No programmatic changes to the resource levels of the central management offices are projected for the period of FY 1984-1988. These resources, consisting in FY 1982 of \$3,038,000 and 65 positions in the appropriated and nonappropriated funds budgets, are projected to increase to \$5,139,000 and 67 positions by FY 1988, a growth of \$2,100,000 and 2 positions. The anticipated higher expenditures are primarily attributable to incorporating into the trust projections the higher costs of present levels of personnel and inflation.

The specialized administrative and technical offices' resources in FY 1982 totaled \$12,600,000 and 363 positions, including both appropriated and nonappropriated funds. An additional \$4,397,000 and 18 positions are projected over the planning period which, if realized, would result in total resources of \$16,997,000 and 381 positions. While much of the trust growth is associated with inflation in personnel and other costs, some federal growth in personnel and program funds is forecast. Emphasis is in the following areas.

Efforts will continue to strengthen management systems to aid in the effective and efficient support of the Institution's operations and to assure adequate control and accountability as a public responsibility. A new payroll/personnel information system will become operational on the Smithsonian's computer by mid-calendar year 1983. Data will be integrated and managed to serve budget, financial, personnel, equal opportunity, and affirmative action requirements. Improved monitoring, reporting and projecting of information is expected. Similarly, 1983 will see the implementation of a procurement/accounts payable information network to provide improved and more timely status information, give better service to vendors, and strengthen cash management. Property management and accountability will continue with documentation of equipment and annual inventories.

Also, in the area of automation, substantially greater attention will be given to an institutional approach to the assessment of needs and solution of information management problems in ways that will unify processes in the total organization. An information resource management office has been established to assure that requirements for data and word processing are identified fully and assessed as to need and priority, that solutions to approved projects are integrated, cost effective, and use the most appropriate methodologies and techniques, and that all steps are adequately documented.

Continued attention will be given to management studies of important areas of the Institution's work; the assessment and correction of potentially vulnerable areas of operations; review and judicious use of travel; the preparation of instructional materials governing administrative, business and technical activities; training of personnel in management skills; and internal and external audits of federal and trust operations. The Board of Regents and its Audit and Review, Personnel and Investment Policy Committees will oversee operations.

Major personnel management objectives are guided largely by the requirements of the Civil Service Reform Act of 1978 for civil service employees, by comparable policies and procedures for trust employees, and by equal opportunity and affirmative action programs applicable to all employees and applicants. Performance appraisal, merit pay, and incentive award systems will be monitored and improved as necessary. Policy and procedural materials will be developed for the civil service and trust employee handbooks. Equal opportunity and affirmative action efforts

will encourage a closer partnership among hiring units, personnel and equal opportunity offices to help the recruitment of qualified women and minority persons, upward mobility of Smithsonian employees, and programs of training and internship. Employment opportunities and programs accessibility for handicapped persons will be emphasized. Benefits programs for trust employees will be reviewed for possible changes. Pay and classification reform legislation, if enacted, will be implemented. New labor-management contracts will be implemented through training and cooperative relationships.

Photographic Services emphasis will be given to photodocumentation of collection items as part of the inventory process with special attention to stamps, coins, currency and other high value items. The recently completed cold storage facility for the negative library will be used and expanded for long-term presentation of research and reference materials. A photographic facility at the Museum Support Center will be made operational. Work will continue, in collaboration with program offices and the safety division, to identify, copy and eliminate nitrate negatives from photographic collections throughout the Institution. A new system for cataloging negatives developed with the assistance of archival and computer personnel is being implemented and will provide a valuable research tool for staff and the public. A color print processing capability will be established partially for the production of otherwise commercially expensive murals. Upgrading of printing and duplicating equipment is planned.

The facilities offices' resources, totaling \$39,328,000 and 1,017 positions in FY 1982 will grow to \$61,183,000 and 1,288 positions by FY 1988. Most of this growth is attributable to rising utility costs and to staffing and equipment resources needed to strengthen the security function. Resources for the operation, maintenance and protection of the Museum Support Center and for the Quadrangle development project also will be required by the facilities offices. Institutional Museum Support Center needs are reflected in Table 7 included in the Special Programs Section, and Quadrangle requirements are presented in Table 13.

The Design and Construction staff, which provides professional architectural, engineering and related administrative services, will increase attention to the development of long-range maintenance, repair and improvement programs for all the Institution's facilities. The planning, estimating, and budgeting function continues to assume greater importance as increasing resources are devoted to the Construction and Restoration and Renovation of Building accounts. The growth in workload reflects the Institution's priority of adequate maintenance for an aging physical plant, of upgrading fire protection systems, of building modifications to improve access for the disabled and to correct unsafe conditions, and of energy conservation. Increased use of contractual architectural/engineering services and automated equipment has held down the need for new positions, although some additional professional staff will be required within the next five years.

The Institution's utility costs for current buildings and programs continues to be a primary additional resource requirement of the Plant Services function. Utility costs are expected to be about \$14,000,000 in FY 1983, and around \$22,500,000 by FY 1988 (excluding about \$1,200,000 in utilities for the Museum Sorting Center). This increase is largely attributable to utility rate increases. Proper maintenance and operation of utility distribution equipment and installation of computerized power management have reduced the effect of past rate increases. The Institution's energy management program has also helped, as well as modifications to exhibit and office lighting systems. Additionally, substantial resources will be provided from the Restoration and Renovation of Buildings account to renovate heating, ventilating and air conditioning systems to achieve greater energy efficiency.

Significant additional staff and related financial resources for Plant Services will be required for the Museum Support Center. About 25 new employees are forecasted to operate the building's heating, ventilating and air conditioning systems and to provide maintenance, repair and transportation services. This staff and operating equipment and supplies will cost about \$640,000. Similarly, about 33 new Protection Services employees and \$570,000 will be required to provide internal and external security at the Museum Support Center as well as health services for both the Center and the Silver Hill facility. Full-year costs for utilities (telephone, postage, electricity, steam and gas) are expected to be about \$800,000 in FY 1984, and about \$1,200,000 by FY 1988.

Operation, maintenance and protection of the Quadrangle development project are planned to increase substantially in FY 1986. Approximately 56 new positions and \$1,500,000 will be required for plant services to maintain and operate the buildings. Protection services will need to phase in 72 positions between FY 1986 and FY 1987; 36 positions and \$840,000 will be necessary in FY 1986, along with an amount of \$1,660,000 for one-time security costs. The remaining 36 positions and related funding will be requested in FY 1987.

An amount of \$480,000 has been requested in the FY 1984 budget for protection services. This request is for continued upgrading of security systems throughout the museums. The first installation of a proprietary security system will be completed at the Museum Support Center by approximately July of 1983, and by the end of 1983 the entire Silver Hill complex will be integrated into the system. A second major installation will begin at the Museum of American History in early to mid-1983. The proprietary security system will be funded from the Restoration and Renovation and Salaries and Expenses accounts. The total funding requirement for security phased over approximately 10 years is estimated at about \$11,000,000. Other areas of emphasis to be accomplished largely with base resources include the strengthening of the Institution's personnel security and health services programs.

Administrative, Financial, and Other Support Services Resource Growth

Resources devoted to all areas of Administrative, Financial and Other Support Services may approach \$83,000,000 by FY 1988, rising from FY 1982 levels of about \$55,000,000. Much of the federal increase will be associated with operating costs of the Museum Support Center and Quadrangle, utilities, and physical plant maintenance and protection. Lesser appropriated amounts are required for a variety of support and logistical services, principally in accounting, personnel, data processing, design and engineering, and photographic services. Trust fund support may increase from the FY 1982 level of approximately \$7,000,000 to about \$10,000,000, largely for the specialized, technical, and other functions associated with administering the activities of the Institution.

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 10 (1)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
CENTRAL MANAGEMENT OFFICES														
CENTRAL MANAGEMENT OFFICES--SUMMARY														
FEDERAL SALARY & EXPENSES	41	1444	41	1763	41	1860	42	1909	42	1914	43	1952	43	1957
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	24	1375	25	1739	24	1815	24	1896	24	2248	24	2684	24	3003
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	1	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	90	0	98	0	101	0	102	0	103	0	108	0	112
RESTRICTED	0	129	0	122	0	69	0	73	0	67	0	67	0	67
FEDERAL GRANTS & CONTRACTS	0	-1	0	0	0	0	0	0	0	0	0	0	0	0
-TOTAL	65	3038	66	3722	65	3845	66	3980	66	4332	67	4811	67	5139
SPECIALIZED ADMIN & TECH OFFICES--SUMMARY														
FEDERAL SALARY & EXPENSES	225	8366	227	8696	227	9769	234	9890	239	10281	242	10473	243	10763
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	136	4138	135	4698	135	5053	135	5288	135	5546	135	5817	135	6100
-AUXILIARY ACTIVITY	2	94	2	86	3	109	3	115	3	120	3	126	3	132
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-ALL OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESTRICTED	0	1	0	2	0	1	0	1	0	1	0	1	0	1
FEDERAL GRANTS & CONTRACTS	0	1	0	0	0	0	0	0	0	0	0	0	0	0
-TOTAL	363	12600	364	13482	365	14932	372	15294	377	15948	380	16417	381	16996
FACILITIES OFFICES--SUMMARY														
FEDERAL SALARY & EXPENSES	1004	38053	1004	43162	1004	44271	1092	50783	1230	56251	1257	57123	1275	59705
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE	12	1218	11	1088	12	1207	12	1266	12	1329	12	1395	12	1464
-AUXILIARY ACTIVITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	1	0	1	0	1	0	1	0	1	0	1	0	1
-ALL OTHER	1	54	1	9	1	10	1	11	1	11	1	11	1	11
RESTRICTED	0	2	0	0	1	2	0	2	0	2	0	2	0	2
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-TOTAL	1017	39328	1016	44261	1017	45491	1105	52063	1243	57594	1270	58532	1288	61183

SMITHSONIAN INSTITUTION
APPLICATION OF OPERATING FUNDS
FY 1982 AND PROJECTED THROUGH FY 1988

TABLE 10 (2)

	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		FY 1988	
	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)	FT EMPL	\$ (000)
ADMIN, FIN'L & OTHER SUPPORT SVCS														
ADMIN, FIN'L & OTHER SUPPORT SVCS-SUMMARY														
FEDERAL SALARY & EXPENSES	1270	47863	1272	53621	1272	55900	1368	62582	1511	68446	1542	69548	1561	72425
UNRESTRICTED GENERAL														
-PROGRAM & ADMINISTRATIVE *	172	6731	171	7525	171	8075	171	8450	171	9123	171	9896	171	10567
-AUXILIARY ACTIVITY	2	94	2	86	3	109	3	115	3	120	3	126	3	132
UNRESTRICTED SPECIAL PURPOSE														
-BUREAU ACTIVITY	0	2	0	1	0	1	0	1	0	1	0	1	0	1
-ALL OTHER	1	144	1	107	1	111	1	113	1	114	1	119	1	123
RESTRICTED	0	132	0	125	0	72	0	76	0	70	0	70	0	70
FEDERAL GRANTS & CONTRACTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-TOTAL	1445	54966	1446	61465	1447	64268	1543	71337	1686	77874	1717	79760	1736	83318
*Less SI overhead recovery	0	5338	0	5700	0	5900	0	6100	0	6300	0	6500	0	6700

FACILITIES PLANNING, CONSTRUCTION, RESTORATION AND RENOVATION

The Smithsonian's responsibility for its museum buildings and other facilities requires a continuing program of repairs and maintenance (some of which is accomplished by staff with funds provided in operating budgets), renovations and restorations, and new construction. The objectives of this program are to provide appropriate, safe, and accessible facilities for research, education, and care of collections. Federal appropriations are the primary source of funds for this work, but, starting with the funding of the original Smithsonian Institution Building, other sources of funds have at various times become available for particular projects.

Beginning in the mid-1970s, the Smithsonian established improvement of its facilities and their operation as one of its highest priorities. This decision to emphasize building repairs and improvements through the budget process reflected the Institution's great concern for the condition of its buildings, many of which date back to the turn of the century, as well as the realization that many more millions of dollars were required each year for this purpose.

Considerable progress has been made in determining the extent to which additional facility support is required. A number of critical projects have been completed and a number of other major projects have been started. These projects include periodic work such as roof replacement, terrace waterproofing, replacing heating and air conditioning equipment, fire detection and suppression improvements, etc. These and other repair and improvement requirements are currently estimated to cost about \$67,000,000 from FY 1984 through FY 1988.

In addition to safety and proper operation of existing buildings, the Smithsonian has in recent years required development of major new facility resources for collections management and replacement and upgrading of deteriorated and inadequate facilities at research field stations at the Chesapeake Bay Center, Edgewater, Maryland; Whipple Observatory, Mt. Hopkins, Arizona; Tropical Research Institute, Panama; at the Zoological Park in Rock Creek and the Zoological Conservation Center at Front Royal, Virginia; and at the Anacostia Neighborhood Museum in Washington.

Redevelopment of the Zoological Park began in 1970 and steadily accelerated to a point where now only several improvement projects and one exhibition project remain. About \$36,650,000 of work has been accomplished and about \$23,000,000 of work is planned through FY 1988. The Aquatic Habitats exhibit may be deferred beyond FY 1988 to allow scheduling of parking garage construction and restudy of the proposed exhibit. At the Conservation and Research Center at Front Royal, a facility master plan

has been adopted which provides a renovation and development program, much of which can be accomplished in the next five years at an estimated cost of about \$9,500,000.

Construction of the Museum Support Center began February 1981 and is expected to be completed in late 1982. This major collection storage, conservation and research center located on a one-hundred-acre tract in Prince George's County will be a focus for collection management and conservation training for future generations. Equipping and operating plans and requirements appear elsewhere in this Prospectus.

The Smithsonian's five-year construction, repair and improvement program which follows is highlighted by an exciting proposal to develop on the Mall new buildings for Eastern and African art. In addition, programs are outlined for the Whipple Observatory, the Chesapeake Bay Center, and the Anacostia Neighborhood Museum.

Construction, Renovation and Restoration Summary
FY 1984-1988

(\$000s)

(Appropriated and Nonappropriated)

Zoo (Rock Creek & Front Royal)	\$ 38,095
Restoration & Renovation	67,186
Other Construction	<u>10,000</u>
	\$115,281

Construction

Quadrangle Development

Public Law 96-36 that authorized planning for development of the Quadrangle was signed by the President on July 20, 1979. In FY 1982, \$960,000 was appropriated to complete planning and design for a Center for African, Near and Far Eastern Culture and Art within 4.2 acres of land bounded by the Smithsonian Building, the Arts and Industries Building, the Freer Gallery of Art, and Independence Avenue. This complex, estimated to cost \$75,000,000, is planned to be financed equally between government and private sponsors. An amount of \$36,500,000 has been appropriated in FY 1983 to allow the Institution to construct a building in the Quadrangle beginning in mid-calendar year 1983.

Quadrangle development is planned to include exhibition galleries and supporting museum facilities for proper display of unique collections of the Museum of African Art, as well as for an expansion of collections of Near and Far Eastern art to be known as the Sackler Gallery. In addition, quarters are planned for the National and Resident Associate Programs, the Visitor Information and Reception Center, the Smithsonian Institution Traveling Exhibition Service, and expanded public education facilities, as

well as a much needed International Center for special exhibitions and symposia. The joining of all these activities and programs in one area will enable the Institution to apply, in a coordinated fashion, its major resources to benefit millions of visitors who travel to Washington each year. It will provide, as well, an opportunity for foreign nations to present their most important cultural accomplishments to this audience.

The Quadrangle site will be occupied above ground by two small entrance pavilions bordering Independence Avenue which will serve as introductory galleries and form an enclosure for an eclectic landscape combination particularly evocative of 19th century landscape design appropriate to the Smithsonian Institution Building and the Arts and Industries Building. The two pavilions will allow access to three building levels below grade providing exhibition galleries, libraries, classrooms, and space for the care and study of collections. The galleries will permit the Institution to present a variety of exhibitions drawn from the resources of its own museums, other United States collections, or borrowed from abroad. The International Center will enable the Institution to organize international symposia and exhibitions and will enhance the public's ability to interpret distant cultures of extraordinary richness and importance.

The design for development of the Quadrangle was originally conceived by the internationally known Japanese architect, Junzo Yoshimura. Since then, the Boston firm of Shepley, Bulfinch, Richardson and Abbott has developed final site and building plans which have received final approval from the National Capital Planning Commission on October 7, 1982 and, with the minor landscape details excepted, the Commission of Fine Arts on November 10, 1982. All requirements of the National Environmental Policy Act and the National Historic Preservation Act have been successfully completed.

Throughout its history, beginning with the acceptance by the United States Government of the bequest of a private individual, the Institution has employed a blend of public and private funding in fulfilling the purposes for which it was established--the increase and diffusion of knowledge. This special partnership of federal appropriations and nonfederal funding sources is vividly illustrated in the financing plan for the Quadrangle. Of the total project cost of \$75,000,000, one-half will be provided from federal appropriations and one-half from nonappropriated sources.

An appropriation of \$960,000 was made available for planning in FY 1982, as well as a construction appropriation request in FY 1983 for \$36,500,000. Of the total nonappropriated contribution, approximately \$27,500,000 has been raised to date from a variety of sources. This sum includes gifts and pledges which have been received from a broad range of donors, including individuals, foundations, domestic as well as foreign corporations, and foreign governments. Also included is a commitment of over \$9,000,000 from the net revenues of Smithsonian auxiliary activities over a multiyear period. Finally, proceeds from the sale of property

currently occupied by the Museum of African Art, excluding the historic Frederick Douglass House, will also be applied toward the cost of construction. Fund raising for the balance of the necessary nonfederal contribution is proceeding well.

Summary of Building Space

	<u>Net S.F.</u>	<u>Gross S.F.</u>
Sackler Gallery	70,000	95,000
Museum of African Art	68,000	90,300
Education Center	10,200	13,800
National Associate Program	6,000	7,200
Resident Associate Program	10,000	11,700
International Center	18,700	23,900
Visitor Information Center	5,900	7,200
Smithsonian Traveling Exhibits	9,300	12,000
General Support	<u>4,400</u>	<u>5,500</u>
Subtotal	203,300	266,600
Mechanical		20,600
Kiosk and access circulation, loading dock, garden level egress stairs, tunnel con- nections to Castle & Freer		76,000
Totals	<u>203,300</u>	<u>363,200</u>

Annual Quadrangle program and operating costs, including one-time costs for such items as collection storage equipment and moving costs, can be found in Table 13 of this Prospectus.

Zoological Park and Front Royal Conservation Center

The original 1973 Zoo Master Plan included forty-one projects at Rock Creek costing as estimated \$118,000,000. Since then, the program has been scaled down to thirty projects and approximately \$75,000,000 at the Zoo in Rock Creek and approximately \$15,000,000 of work at the Conservation Center. This savings is due largely to the acquisition of the Front Royal site in 1975, which permitted a reevaluation of the Rock Creek development plan, eliminating many costly and space-consuming projects necessary for breeding and research. The revised plan recognizes that many animals can be provided for at Front Royal at less expense than at Rock Creek. Projects that can more effectively be conducted at Front Royal will continue to be sited there and include nearly all major hoofstock breeding requirements, back-up housing for small primates and numbers of other small mammals, bird incubation and breeder functions, as well as holding facilities for long-term breeding programs.

Central Area Redevelopment. Construction of the new Ape House and renovation of the Reptile House, including a new nocturnal exhibit in the basement and renovation of the Small Mammal House, is complete (these projects total about \$4,300,000, appropriated in FY 1980). Construction of Monkey Island (FY 1981 appropriation of \$1,840,000) will be completed in early 1983. Except for minor projects, redevelopment of the central exhibit area is complete.

Aquatic Habitats. The Aquatic Habitats project, is presently shown as rescheduled beyond this planning period. A reevaluation of this schedule will be made, however, in light of Congressional interest in earlier development. This proposed exhibit includes six projects combined in location for purposes of common water-system support. The cluster is planned to be located at the south end of the Park along Rock Creek, and will be an extension to the series of aquatic exhibits now being completed for beavers, river otters, seals, sea lions, and polar bears. This will be a unique education and exhibit facility. Design, specifications, and construction funding will be requested beyond this planning period following careful reconsideration of its program and technical components.

Holt House and Olmsted Walk. Realignment of Olmsted Walk and preparation of a number of small animal exhibits along the walk are planned to be designed in FY 1983 (\$350,000) and constructed in FY 1985 (\$2,000,000), FY 1986 (\$1,000,000, and FY 1987 (\$1,500,000. Renovation of Holt House is planned as part of this improved research facility.

General Services and Parking Facility. Additional Zoo redevelopment savings are anticipated by reducing the scope of the second-phase construction of the General Services and Parking Facility; \$700,000 will be sought for design and cost estimate purposes in FY 1986. The present estimate for construction of this facility is approximately \$16,000,000. This estimate will be updated and construction funds will be sought in FY 1987. The Institution plans to offset some construction expenses by using parking revenues being held in trust to help meet this need and which are expected to amount to approximately \$3,000,000 by FY 1987. For over a decade the Institution has recognized the requirement for a centralized parking facility at Rock Creek. Such a facility would allow the return of several surface parking areas to animal exhibition spaces and also increase green space around the central exhibition area of the Park. The proposed parking garage would include approximately 900 spaces compared to the existing 300 spaces on the site contiguous to the present General Services Building. At the same time, overall numbers of parking spaces at the Zoo would increase. A pedestrian walk and tunnel would be constructed to allow visitors unimpeded access to the central Zoo animal area.

Rock Creek Repairs and Renovations. In addition to the Redevelopment Master Plan, the Zoological Park is responsible for a continuing program of major maintenance and repair for its sixty separate facilities and extensive network of paths, roadways, and landscaped areas. Over \$1,000,000

National Zoological Park Redevelopment

and

Front Royal Conservation Center Development Plan

FY 1983-1988

(\$000)	1983	1984	1985	1986	1987	1988	Totals
<u>Zoological Park Redevelopment</u>							
Parking Facility			400	700	13,000 ^{/1}		13,700
Health & Research				3,900			4,300
Olmsted Walk			2,000	1,000	1,500		4,850
Subtotal	350		2,400	5,600	14,500		22,850
Renovations & Repairs	1,000	1,000	1,100	1,250	1,400	1,500 ^{/2}	7,250
Park Subtotal	1,350	1,000	3,500	6,850	15,900	1,500	30,100
<u>Conservation & Research Center</u>							
<u>Development Plan</u>							
Small Animal Facility		700					700
Veterinary Hospital		1,400					1,400
Maintenance Facility			100	725			825
Primate Facility			170	1,700			1,870
Large Hoofed Stock						2,000	2,000
Subtotal		2,100	270	2,425		2,000	6,795
Renovations & Repairs	200	400	450	450	600	650	2,750
Center Subtotals	200	2,500	720	2,875	600	2,650	9,545
Grand Totals	1,550	3,500	4,220	9,725	16,500	4,150	39,645

^{/1} Rock Creek parking revenue is expected to contribute over \$3,000,000 towards the estimated construction cost of \$16,000,000.

^{/2} In subsequent years, renovations and repairs are expected to be about \$1,500,000 at the Zoological Park and \$650,000 at the Conservation Center.

will be required annually for structural, mechanical, electrical, and plumbing repairs; renovations; animal support and housing requirements; and grounds, roadways, and utility repairs and improvements.

Conservation Center Development Plans, Renovations and Repairs. Since acquiring the Front Royal site in 1975, the Zoo has been engaged in a program designed to occupy and hold the land including some emergency repairs. The Institution has retained serviceable structures for use where there is clear need, and is demolishing deteriorated and unusable structures. Most of the animal containment fencing is in place for major paddocks and for the overall site, and most of the initial repairs to essential utilities and buildings have been completed. Total repair and planned development costs spanning FY 1984-1988 for the Conservation Center are estimated to be approximately \$9,500,000. In FY 1984, \$2,500,000 is expected to permit the Conservation Center to advance in coordination with Rock Creek construction. Projects include additional small animal facilities and design and construction of a new veterinary hospital.

Restoration, Renovation and Other Construction

The Restoration and Renovation of Buildings (R&R) account is used to fund building repairs, alterations and improvements, as well as the construction of additions to existing facilities and minor new facilities. Substantial annual funding is required in order to assure the maintenance and preservation of the Institution's buildings; to provide a safe environment for visitors, staff and collections; and to meet program objectives.

The Institution's building and other facilities (other than the Zoo) consist of twelve museum and gallery buildings in Washington, D. C. and New York City housing research and collections management activities and a wide range of exhibitions in the fields of science, history, technology, and art. Also included are the Radiation Biology Laboratory in Rockville, Maryland; the preservation, storage, and air and spacecraft display facilities at Suitland, Maryland; centers for biological research, conservation, and education in Panama and on the Chesapeake Bay, near Annapolis, Maryland; an oceanographic research station at Fort Pierce, Florida; a center for astrophysics in Cambridge, Massachusetts, and the Whipple Observatory on Mt Hopkins, near Tucson, Arizona; and a number of administrative, storage, reference, distribution, and other supportive facilities primarily in leased space.

The FY 1983 R&R appropriation request of \$8,450,000 reflects the Institution's commitment to acquiring and sustaining a level of funding consistent with the size, diversity, and age of Smithsonian facilities and known work requirements. The following major projects are planned for FY 1983: continuation of roof and facade repairs at the Arts and Industries Building (\$2,000,000); continuation of facade repairs at the Renwick Gallery (\$1,000,000); continued implementation of the fire protection master plans for the Natural History Building (\$350,000) and the

American History Building (\$350,000); continued removal of asbestos insulation located in several Smithsonian buildings (\$350,000); the second phase of renovating the heating, ventilating, and air conditioning (HVAC) system for the Freer Gallery (\$500,000); continued design and construction on HVAC and energy conservation projects for the American Art/Portrait Gallery Building (\$700,000), the Arts and Industries Building (\$200,000), the American History Building (\$375,000), and the Natural History Building (\$350,000); and continued safety improvements such as the installation of an emergency generator at the Whipple Observatory (\$175,000).

General Repairs and Improvements. Funds requested in this category support projects that do not lend themselves to discrete categorization, as well as minor emergency repairs, such as equipment failures or structural defects that cannot be anticipated and that arise from heavy use, extreme weather conditions, or other circumstances. Examples of projects in this category are interior repairs to floors, ceilings, partitions, doors and building hardware; space renovations which would create additional or more effective space for program activities; renovations of exhibition and other public space; repairs to roads and walkways; elevator and escalator repairs; and lighting improvements. A total requirement of approximately \$6,108,000 is anticipated for this planning period.

Facade, Roof and Terrace Repairs. Maintaining the integrity of the exteriors of all Smithsonian buildings is critical to preventing major structural damage and deterioration due to age and weathering, and to ensuring a safe environment for visitors, staff, and collections. Energy conservation also demands water-and weathertight exteriors. Work in this category includes a variety of the major projects, such as roof replacement, repointing and recaulking facades, exterior painting, and window repairs. Requirements that fall under this category of repairs have become apparent in some of the Institution's newest buildings as well, and must be corrected. In addition to major projects, a scheduled program of maintenance and upgrading to protect building exteriors must be performed annually.

Planning and design for remaining exterior work at the Arts and Industries Building were completed in FY 1982. Major requirements include completion of the roof replacement, repointing of the masonry facade, extensive window repairs, and replacement of gutters and downspouts. During 1982-1983 construction will focus on roof replacement and facade and window repairs to the building's northwest quadrant; \$750,000 was included in the FY 1982 budget request for this purpose, as will carryover funding from the previous year. An amount of \$2,000,000 is included in the FY 1983 request and \$2,500,000 will be needed in FY 1984 to sustain progress on this project throughout the planning period.

During FY 1981, detailed drawings and specifications for the Renwick Gallery facade renovation were completed. The Commission of Fine Arts and the Joint Committee on Landmarks for the District of Columbia approved the use of precast concrete in lieu of natural stone. In FY 1982, the first construction phases began using funds appropriated in FY 1981 (\$250,000) and in FY 1982 (\$750,000). This work will include the production of the

Table 12

Restoration, Renovation and Other Construction

	<u>Fiscal Years</u>					<u>Totals</u>	
	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1984-88</u>
<u>Restoration & Renovation</u>							
General Repairs	300	345	2,218	1,725	1,100	720	6,108
Facade, Roof & Terrace	3,300	4,800	4,685	1,810	175	3,325	14,795
Fire Protection	1,205	1,085	1,455	1,035	1,175	925	5,675
Safety & Security	665	785	2,023	1,540	1,690	850	6,888
Utility Systems	2,380	1,370	2,360	6,190	8,550	6,880	25,350
Other Projects <u>/1</u>	600	615	1,855	2,775	990	2,135	8,370
Subtotal	8,450	9,000	14,596	15,075	13,680	14,835	67,186 <u>/3</u>
<u>Other Construction</u>							
Chesapeake Bay Center <u>/2</u>				5,000			5,000
Anacostia Neighborhood Museum <u>/2</u>						5,000	5,000
Subtotal				5,000		5,000	10,000
Grand Total	8,450	9,000	14,596	20,075	13,680	19,835	77,186

/1 Primarily work at the Whipple Observatory, the Chesapeake Bay Center, and the Tropical Research Institute.

/2 It is anticipated that authorization will be sought and funding requested as individual construction projects.

/3 R&R fiscal year and work category subtotals differ from earlier projections as a result of the FY 1984 OMB markup and subsequent redistribution of projects.

actual precast units. Replacement of existing sandstone is scheduled to begin in FY 1983 (\$1,000,000). An estimated \$1,800,000 will be required in FY 1984 to complete this project.

The facade, roof, and terrace of the Air and Space Museum require a variety of repairs and improvements in order to eliminate water leaks and moisture problems that have developed since the building was completed in 1975. In FY 1981, a study was initiated to determine the best means of correcting these deficiencies. The first repair phase is expected to begin in FY 1982 with funds appropriated in FY 1981. An amount of \$200,000 is included in the FY 1983 budget request for window, wall and skylight repairs, and some additional funding will be requested in future year budgets to continue this project.

Additional projects scheduled during the planning period include completion of the present facade recaulking project at the American History Building and later replacing its roof, repointing of the Natural History Building facade, repair of the Cooper-Hewitt's Miller House facade, and window repairs and replacements at the Renwick Gallery and the Natural History and Smithsonian Buildings. A total requirement of approximately \$14,795,000 is anticipated for this planning period.

Fire Detection and Suppression Systems. The Institution is continuing to develop and implement plans for upgrading fire protection systems in all buildings in order to provide a level of safety consistent with today's standards and technology. Work in this category includes such items as the installation of heat and smoke detection systems, sprinkler and chemical suppression systems, and fire doors and walls. Improved systems are installed as exhibitions are changed, and fire retardant materials are used wherever possible.

The implementation of comprehensive fire protection master plans is in progress at both the Museum of Natural History and the Museum of American History. Construction includes the installation of upgraded sprinkler systems, new detection systems, fire pumps, generators and control panels, and architectural modifications to create more efficient fire zones. A total requirement of approximately \$5,675,000 is anticipated for this planning period, of which about \$3,600,000 will be required for the Museums of Natural History and American History. Other major fire protection projects planned for the next five years include the installation of additional smoke detectors in the Smithsonian Institution Building, and the installation of a sprinkler system at the Freer Gallery, the American Art Museum and the Portrait Gallery in addition to several buildings at the Garber facility at Suitland. Plans also include the implementation of a fire protection system for Barro Colorado Island in Panama, upgrading of smoke detectors and sprinklers in the Arts and Industries Building, and completion of a fire protection system at the Chesapeake Bay Center.

Access for the Disabled, Safety and Security, and Correction of Hazardous Conditions. Substantial progress has been achieved in eliminating architectural barriers at Smithsonian buildings. Modifications to the

Hirshhorn Sculpture Garden were completed in FY 1981 and a wheelchair lift has been installed at the Mall entrance of the Smithsonian Building. All public areas at the Museum of African Art were made accessible to the disabled during FY 1982. Several Smithsonian facilities still require additional modifications to meet recently updated standards for disabled person access. These projects are scheduled to be accomplished during this planning period.

The elimination of exposed asbestos insulation located in several buildings continues to be a high priority. An amount of \$350,000 is included in the FY 1983 budget request for this purpose, and approximately \$1,800,000 will be applied to the correction of this problem between FY 1984 and FY 1988.

Construction and equipment related to a new proprietary security system will be a prominent item in the Institution's R&R budget requests for the next 5-to-10 years. Now being designed, this system will incorporate state-of-the-art computer software which can be updated as new technology becomes available. Projects include rewiring and installation of electronic detection devices and communications equipment. Also being planned is an exterior lighting system for all Mall buildings; installations are expected to start in FY 1985. These security projects are estimated to cost about \$2,400,000 between FY 1984 and 1988.

This R&R category is estimated to require approximately \$6,888,000 in appropriations over the next five years.

Utility Systems Repairs and Improvements. Upgrading the heating, ventilating and air conditioning (HVAC) equipment and controls in Smithsonian facilities will contribute, more than any other factor, to the reduction of energy consumption. The HVAC systems in most buildings were designed with neither the goals of current energy standards nor the advantages of technologies that are now available. Major improvements are required, as well as minor maintenance and repairs, to achieve energy efficiency, to ensure reliability of existing systems, and to maintain environmental conditions necessary for the protection of the collection. Equipment requiring upgrading or replacement includes such items as air handlers, chillers, pumps, coils, fans, compressors, cooling towers, electronic controls, and exhaust and filtration systems. This category of work also includes associated electrical and plumbing repairs and improvements.

In FY 1983, the last construction phase for the Freer Gallery HVAC renovation project is planned for completion (\$500,000). Based on the results of study and design efforts, major HVAC renovation projects and energy conservation improvements are planned for the next five years at the Natural History, American History, Arts and Industries, and American Art/Portrait Gallery Buildings. Energy conservation improvements also will be made at the Hirshhorn and Air and Space Museums. Renovation of the electrical wiring in the Smithsonian Building will continue. A new water distribution system and modern sewage treatment plant is planned for Barro

Colorado Island. At this time, it is anticipated that these and other utility systems repairs and improvements will cost approximately \$25,350,000 between FY 1984 and FY 1988.

Other Projects and Construction

Chesapeake Bay Center for Environmental Studies

Present facilities at the Chesapeake Bay Center include a renovated dairy barn with a new laboratory wing addition, an education and dormitory building, some small farm buildings which provide for storage and vehicle and boat maintenance, and several trailers.

The dairy barn building was renovated between 1969 and 1971 with funds from the Old Dominion Foundation. This building provides the main administrative and laboratory space. In 1974, a request was made for foundation support and other private funds to construct an education building to be used to house students and provide for public programs, workshops and seminars. This facility was completed in 1975. From about 1971, because of lack of additional space in the Old Dominion Building, new staff were housed in trailers acquired as surplus. These were generally inferior for research use.

Currently, the Bay Center has developed a phased facilities renovation and improvement plan which provides, in modular fashion, additional space for research, education, administration, and services as they are required. Phase I of this six-phase program was completed in FY 1978 and FY 1979 with approximately \$548,000 of nonappropriated funding, and provides 5,000 square feet for chemical laboratory needs. Phase II construction, a maintenance and shop building, has been completed using \$150,000 of appropriated funds provided in FY 1979 and \$124,000 in FY 1980. Phase III, the final phase planned at this time, includes about 15,000 square feet of sophisticated laboratory and other administrative facilities. The Smithsonian plans to seek construction authorization for this project, and will request appropriations in FY 1986 for design and construction (\$5,000,000). In FY 1984, \$130,000 is projected for preparation of a Site Development Master Plan. It is anticipated that this plan will identify short-range needs to accommodate CBCES growth and will include a permanent solution to the existing sewer system problems. In addition, up to \$1,015,000 of R&R funding will be required over the next five years for minor repairs and improvements to buildings and roads.

Anacostia Neighborhood Museum

A study and review during FY 1981-82 resulted in a redefined program for the Anacostia Museum and the need for improved Museum facilities. Presently, the Museum's administrative staff and exhibition space are located in a leased building that is in disrepair and unsuitable for long-term occupancy. It is anticipated that a second, small building could be constructed on federal land in Anacostia adjacent to the present Exhibits

Lab building at Fort Stanton Park. An amount of \$450,000 is being requested in FY 1984 for this purpose. Planning for a new and modern museum building of about 30,000 square feet will be started during this planning period. At this time, this project is tentatively scheduled for FY 1988 at an estimated cost of \$5,000,000.

Astrophysical Observatory (Whipple Observatory)

Further development of facilities at the Whipple Observatory near Tucson, Arizona, is required to support expanded research activities associated with the installation of the Multiple Mirror Telescope. Conversion of the single-lane unpaved access road into a safe, insloped, all-weather road is well under way and will be completed during FY 1983. The only road areas to be paved are those portions abutting observational facilities in order to minimize the amount of dust raised by vehicular traffic. Because of the favorable construction market in the southwest, the insloped road will be completed under budget. This will enable reprogramming of current remaining R&R road funds to accelerate the renovation of the emergency power station by one year. Completion of this project is expected in FY 1983.

Research activities of the Whipple Observatory are conducted on a 4,744-acre site at the 7,600-foot level of Mount Hopkins which is leased from the U.S. Forest Service and reached by a limited-access secondary road that originates at the headquarters location in Amado, Arizona.

The headquarters site is midway between the cities of Tucson to the north and Nogales to the south and offers easy access from a nearby interstate highway for visitors and for the delivery of research equipment and supplies. On the property is a one-level school building and a residence which have been converted to office use. There are also various automotive service, repair, and storage buildings with gravel parking and driveway areas, as well as space for a motor pool which provides daily access to the mountain site, continual road maintenance, and winter snow removal.

The school building serves as the base office and staging area for mountain research activities, and includes a small, informal Visitors' Center which has been remodeled to include displays on the history of astronomy and audiovisual presentations describing Smithsonian research.

The Observatory is seeking to purchase two acres of land from the Tucson School District in Santa Cruz County, Arizona, and two acres of adjacent land from private owners for a total price not exceeding \$150,000. The four acres will be used for the headquarters of the Fred Lawrence Whipple Observatory which has occupied the property under a lease arrangement for the past thirteen years.

Smithsonian ownership of the property would allow the erection over several years of facilities in a planned and coordinated fashion that would respect the integrity of the neighboring community and protect the local

environment. Because current and projected needs of the Observatory necessitate a larger headquarters facility, leasehold improvement is not economical. Of eight sites studied and analyzed, the Amado one was chosen because it is accessible and visible from Interstate 19, contains all necessary utilities, is flat and conducive to appropriate development, can be developed to meet the Smithsonian's present and future need with minimum disruption to the current operations, and can be developed cost effectively. In FY 1984, \$40,000 is being requested to develop a master plan for the Amado base camp, with expectations of acquiring land acquisition and design funding for repairs and improvements in FY 1985, and construction funding of approximately \$1,605,000 in FY 1986.

SAO construction and other facility requirements are estimated to cost approximately \$2,420,000 in this planning period.

Tropical Research Institute

Continuing development requirements are anticipated in the coming years for implementing the Panama Canal Treaty and a land management and facilities plan for the Barro Colorado Nature Monument. Also being planned is a consolidation of research and support facilities and an upgrading of existing facilities.

The Institute's research facilities on Barro Colorado Island, as well as those at Naos Island, Galeta Point and other locations, continue to offer unique research opportunities to scientists and students throughout the world. Maintenance, repairs, and improvements are difficult and costly because of accelerated deterioration and logistical problems associated with these remote tropical locations. Preservation of these facilities requires constant support to protect and improve them for the future.

Presently, installation of a new wet laboratory and saltwater distribution system at Naos Island is in use for marine research. In addition, renovation and consolidation of other research facilities at Naos have been planned. At Barro Colorado Island, upgrading of sanitary and water facilities and renovation of almost all structures are necessary. Presently, \$418,000 (some of which was reprogrammed from various STRI projects in FY 1979 and 1981, and \$195,000 which was provided in FY 1980) is being used to construct a new library facility at the Tivoli site in Panama City. Additional consolidation of laboratory and administrative space at this location is desirable.

Major repairs and maintenance of the Tropical Research Institute's research and support facilities will require increased attention and funding in the years ahead, and it is estimated that about \$2,930,000 will be needed over this planning period.

BEYOND FY 1988

There is merit to looking further ahead than just five years in communicating to OMB, Congress, and others the Institution's operating and capital objectives and in planning for resource levels to match the Smithsonian's basic growth aspirations. The Smithsonian must look ahead fifteen or twenty years if it is to continue to be successful in meeting its responsibilities to the public, the museum and scholarly communities, and the nation. This chapter presents a brief summary of longer-range possibilities based on existing institutional policies, and projections to about FY 1995.

Emphasis on research, exhibition, collections management, and other basic programs, of course, will continue. Quality activities and services for the visiting public and Associate members are other basic aims and will be stressed. New buildings, where necessary, and careful attention to those now under the care of the Institution, require longer-range thinking if results are to be useful to the public. The most effective use of available federal and trust resources in achieving general objectives will continue to motivate overall management planning. As the planning period is extended, however, it becomes increasingly difficult to detail the varied opportunities and related management choices which will emerge. Nevertheless, it is possible to set down institutional desires, directions, and resources which can be realized if conditions external to direct management control permit. In interpreting materials contained in this chapter, it is important to highlight the following:

- . A generally favorable economic situation is assumed to prevail over time. The Administration is predicting that inflationary pressures on the nation's economy will continue to lessen. For purposes of describing institutional plans beyond 1988, inflation is assumed to have only minimum influence.
- . Essential levels of appropriations for capital and operating projects as outlined in the preceding chapters for years FY 1984-88 will be forthcoming from the Executive and Congressional branches of government.
- . Visitation will remain strong.
- . Public acceptance of the Institution's various programs and products, and supporting trust funds generated through investments, Associates and auxiliary activities will continue to allow net proceeds to grow moderately and to be applied to Smithsonian objectives as approved by its Board of Regents.

- . Future transfers to the Institution of historic buildings that might be preserved for Smithsonian use are possible, but the timing is not known. Likewise, it is not possible to speculate on the availability of major new gift collections that might require special housing for display or other purposes.

Given these general assumptions, Smithsonian management predicts continued success through the turn of the century in developing resources to serve the public and the nation through its varied programs.

Program Expectations

With regard to longer-run developments in programs, the Institution's activities have always spanned national and international interests, but in future years its multinational character should begin to flourish in an even greater fashion, and, in keeping with longer-run natural and cultural forces, help lead to a more singular world community.

The construction of the Quadrangle, now planned for completion in FY 1986-87, is basically an effort to provide the Institution with appropriate and sufficient space to display the great art and history collections of Near and Far Eastern and African cultures. In the ensuing years, its programs will provide a window on the Mall for cultures now representing two-thirds of the world's population, spanning an area from Japan, through Asia, the Middle East, and Africa. The roots of these cultures run deep, and the contributions to man's development from these areas have been and will continue to be a pervasive force in the world. The Quadrangle and its programs will promote the long-run causes of international peace and understanding. While the content of the Institution's longer-range exhibition programs, as in the past, will focus on historical events important to the development of the nation, of man and his culture, and be based on the latest findings and interpretations of the international community of historians and scientific investigators, in general, exhibitions can be expected over time to take on more of an international flavor, reflecting the interdependence of nations in pursuing essentially common cultural and humanistic goals in a world of limited natural resources.

The Institution expects to apply continuing emphasis to its research programs, especially in areas where it has developed considerable expertise such as basic taxonomy and systematics, monitoring the effects of long-term environmental change, examining the basic components of matter, studying the universe, and expanding knowledge of animal behavior. Research endeavors expected to be more thoroughly cultivated and developed include archeometry, species conservation and propagation, and man-related disciplines. The rapid development of new techniques and fabrication of new instruments in the field of astrophysics now opens the possibility of constructing a telescope with double the collecting area now provided by twenty of the largest telescopes in the world. The New Technology

Telescope, now widely discussed in the astronomical community, will be of direct interest to the Institution's astrophysical laboratory. As a part of its longer-term research agenda, the Smithsonian may indeed be more of a focus for the activities of some of the American overseas research centers whose research interests align with those of the Institution.

Improvements to all aspects of managing collections is another long-term concern, including continuation and updating of the comprehensive inventories, security mechanisms, and loan processing arrangements, the development of automated information systems, and the conservation and preservation of artifacts and objects for research and display purposes. The Smithsonian will always have major responsibilities directed to the preservation and care of collections. Objects made by man, or collected by him from nature, are the tangible products of his historically persistent struggles to comprehend and live with his environment, extend mastery over it, improve his condition, and express his spiritual aspirations. The collection, interpretation, preservation, and transmission of knowledge related to important objects is essential if this and future generations of people are to measure and understand the character of international cultural and natural change.

The programs, which will be housed at the Museum Support Center building, will be fully operational by the mid-1990s. The facility and its programs were fundamentally conceived a decade ago to provide space, laboratories, training areas, and equipment, all designed for the efficient storage, study, care and preservation of collections. In a visible fashion in future years, the Center and its operations represent the Institution's commitment to apply the most advanced conservation and preservation techniques known to minimize the unavoidable toll of time on the products and discoveries of Man, and to allow them to be passed on as a resource for future research and exhibition.

Educational programs and services to the public, including classes, publication and other media activities, are expected to grow in number and variety. They will be adapted in a style and format which will be in keeping with the changes that will be taking place in television and communications technologies.

Operational Funding Expectations

With regard to federal funding growth associated with operations, the Smithsonian expects to keep abreast of inflation; obtain the necessary resources to implement its programs being planned for the Quadrangle and Support Center; experience some continued moderate increases for research, exhibit, or other program opportunities as they arise; and to maintain an appropriate balance of funding for its science, history, art, and other major operating interests.

Essential levels of S&E operating resources through FY 1988 are projected in earlier chapters as approximately \$200,000,000.⁵ For illustrative purposes, even using a five percent annual growth figure to cover inflationary cost increases and program requirements (beyond those which can reasonably be supported through reallocation of base funds), the Institution would be operating at an appropriation level approaching \$300,000,000 in FY 1995. An operating level of this magnitude seems incomprehensible when viewed from today's perspective. This figure, however, is conservative, and a genuine indication of what could happen.

As in federal operations, the basic approach regarding long-range trust prospects is a conservative one. Sustained moderate growth in the Institution's endowment is a high priority now and will continue to be throughout the foreseeable future. During FY 1975-80, pursuant to the Board of Regents' policy of increasing the Institution's endowments, the market value of endowments in restricted and unrestricted areas grew from around \$42,000,000 to \$78,000,000 as a result both of gifts and transfers to these funds, as well as prudent investment. Assuming a comparable economic climate and sound management investment choices, that performance should continue for a decade or so hence. It is planned that a prudent portion of the Institution's net revenues will continue to be added to the unrestricted endowment and that gifts for restricted purposes will also continue.

Overall, by the mid-1990s, if trust revenues are sufficient to offset the effects of inflation, the Institution hopes to be able to increase its net earnings for auxiliary and business-related activities to about \$17,000,000 or \$18,000,000. The pattern of applying unrestricted net funds throughout future years to institutional operations is expected to be much the same as now: to enhance endowments; to fund Board of Regents' approved programs in research, fellowship, and education areas; to enhance program activities with the museums and bureaus; and to support central institutional administrative requirements.

Grants and Contracts

Grants and Contracts from the federal government have been a significant source of funds for Smithsonian contributions to scientific and cultural advances almost since the Institution's establishment. Government interest in support of the national basic research enterprise may never again reach the levels recorded in the 1950s and 1960s, simply because of limited resources for higher educational institutions, research laboratories, and establishments such as the Smithsonian. Nevertheless, the federal government cannot neglect basic research, and must continue to support and stimulate through the grant and contract mechanisms quality investigations into selected areas. The Institution has distinguished

5. Projected level of S&E resources required excluding future year legislated pay increases.

itself in various basic research disciplines, and intends to continue to do so over the long run, partially through sustained grant and contract work received from the federal government, as well as its other sources of funding.

Foreign Currency Program

The Smithsonian has conducted programs with excess foreign currency funds since 1965. Foreign currency projects, consisting of grants to American institutions of higher learning, including the Smithsonian itself, museum professional exchanges, and occasional restoration projects of international importance such as the Temple of Philae in Egypt, have occurred in most of the excess currency countries. The results have been amply reflected in publications, conference presentations, and exhibits, and in sustained scholarly relationships. The countries where excess currency projects could be funded were eleven, and are now reduced to five. Opportunities may be limited over the longer run if present excess currencies and countries diminish even further. While the international context changes periodically, the Smithsonian expects its program to remain active as long as currencies are available. By forward funding certain high-priority efforts, it is expected that activities will continue forward beyond the period when countries are no longer on the excess list.

Buildings and Facilities

At the end of FY 1982, the Smithsonian occupied approximately 4,200,000 square feet of building space, owned or leased, for all purposes in facilities located in Washington and elsewhere. By FY 1988, with the occupation of the planned Quadrangle facility by FY 1986, and the essential completion of facility work for the Zoological Park in Rock Creek and at the Front Royal Conservation Center, space occupied by the Institution will approximate 4,900,000 square feet. By FY 1995, if the Institution continues to be successful in planning and accommodating its major space objectives, space available might approach 5,200,000 square feet. Implicit to the projections beyond FY 1988 are the following general institutional objectives:

- . Consolidation of program, administrative, and support operations into Smithsonian-owned facilities on properties controlled by the Institution or the federal government, and the minimum reliance on leased or rented locations.
- . Continued phased development of the Suitland properties for controlled warehousing, preservation, conservation, and study of the collections.
- . Acquisition of a building site convenient to the Mall and construction of a light, industrial-type facility for technical and administrative support of museum operations.

Smithsonian rentals at today's rates from all sources of funds now cost about \$3,000,000 annually. Primarily, these are for research, collections management, and support purposes. About two-thirds of these costs are represented by activities in the Washington, D. C. area, and the balance by field activities, principally the Astrophysical Observatory. Substantial consolidation of space holdings took place in 1972-75 in the Washington area to obtain more appropriate and efficient space, to simplify logistical support, and to avoid sizable rent increases. Four leased buildings were vacated over this period with many operations being relocated to a single leased facility at North Capitol Street. The Oceanographic Sorting Center will move to the Museum Support Center from the Navy Yard Annex and annual rental savings close to \$270,000 will occur. These savings will be used in future years to offset equipment costs at the Museum Support Center.

This consolidation process should continue and other rental locations, including North Capitol Street, are factored into our long-range consolidation plans. They are the Anacostia Neighborhood Museum; the Radiation Biology Laboratory; the Astral Building in L'Enfant Plaza which contains the offices of several support and program functions such as internal audits, accounting, and performing arts; and the Cambridge headquarters of the Astrophysical Observatory. The presence of the Support Center and Quadrangle facilities affords opportunities to examine space in other buildings, primarily the Natural History and Arts and Industries Buildings, as resources to meet a portion of needs now met in expensive rental space.

Institution facility requirements will be restudied at appropriate intervals and management is not presently committed to any planned building configuration or schedule for appropriations and construction. However, the Suitland location seems ideal for fulfilling many of the Institution's consolidation and collection management objectives. The building under construction at Suitland will permit the Institution to meet many collections storage needs primarily in the natural history area, establish training and other conservation program space, and vacate rented space at the Navy Yard. A subsequent phase of development at Suitland would alleviate emerging collection storage pressures in the history and art bureaus.

Zoological Park. Development of the Zoological Park's facilities will be largely finished by FY 1988, with the possible exception of the aquatic habitat facilities at Rock Creek and the visitors/conference facility programmed for the Conservation Center. The proposed aquatic habitat exhibit will be reevaluated soon to determine when it might best be accomplished. Over the years, R&R funds will be sought for the Center for such items as installation of utilities and access roads, security buildings, quarantine and animal hospital facilities, and maintenance facilities. The visitors center as currently envisioned will add about 35,000 square feet to the Institution's public/exhibit areas after FY 1988.

Radiation Biology Laboratory. The Institution recently exercised an option to renew the lease for the Radiation Biology Laboratory's facilities at Rockville, Maryland, through 1985, and anticipates exercising a second option which would extend this lease through 1990. Past experience indicates that technically sophisticated laboratory space is acquired for lease only at significant expense, and with less than satisfactory results. Sometime during the period FY 1988-90 it will be necessary to acquire appropriate new quarters for the Radiation Biology Laboratory. Over the next several years, the Institution expects to complete a study of the Laboratory's space requirements and to explore how these could be met by further development of existing Smithsonian property. These needs might equate to around 60,000 square feet of research and laboratory space.

Astrophysical Observatory. The Smithsonian Astrophysical Observatory depends entirely upon rental space for its activities in Cambridge, Massachusetts. An Observatory-owned facility at Cambridge could offset long-term escalating rental costs and provide additional benefits of consolidation of locations and increased space. A 100,000 square foot research and support building programmed for construction sometime after FY 1988 would accommodate the Astrophysical Observatory's requirements, and must be considered.

Cooper-Hewitt Museum. The Institution currently is exploring ways to make maximum use over the long run of the land and space available for Cooper-Hewitt operations. Under consideration is a tentative plan which would allow a new wing to be constructed at some future date on the parking area adjacent to the Carnegie Mansion and behind the Miller townhouse. Once erected, this phase would be followed by renovation of the townhouse and reorganization of the Carnegie Mansion. The new building would add substantially to the Museum's capabilities for special changing exhibitions, and allow the Carnegie Mansion to house the Museum's permanent collections and exhibitions. The entire project is envisioned as funded from donations and gifts. The Institution has received a private donation to pursue concept planning, including design schematics and other engineering analyses. It is too early to make judgments on the ultimate configuration, dimensional possibilities, and potential construction timetable.

Mall Site. The property bounded by Third Street, Maryland Avenue, Fourth Street, and Jefferson Drive has been reserved by Congress for the future public use of the Smithsonian (P.L. 94-74, approved August 8, 1975). There are currently no plans for the development of this site, but the Institution will continue to consider potential use of the land for establishing a last major Smithsonian Mall museum before the turn of the century. In the meantime, it is expected that the site will continue to be used for temporary exhibitions and other purposes by federal and other organizations.

Mall Visitor Access. The Institution will continue during the present five-year cycle and beyond to improve visitor access to all Mall museums and monuments. This includes enhancing present public transportation to

and around the downtown area and, in the foreseeable future, providing adequate parking for visitors who will drive to the Mall area. This last concern encompasses attempts to increase capacity of current Mall resources by making available on weekends current government parking, and planning for additional Mall area parking underground.

Other Projects. The necessity for additional space to support the collections and other programs of the American Art and Portrait Gallery Building could provide a unique opportunity for further development of a center of American art if the old Tariff Commission Building (across F Street from the American Art/Portrait Gallery Building) can be restored and transferred to the Institution. The prospects of this opportunity to preserve a historic and architecturally significant building and devote it to public purposes are presently considered to be long range.

Planning efforts will continue regarding the possibilities of off-site storage areas for large aircraft and space objects collected by the Institution's Air and Space Museum. Also, consideration will be given to completion of the Tivoli complex of the Tropical Research Institute, including a conference center with suitable exhibition space.

Additionally, the Institution will actively support efforts by the Woodrow Wilson International Center for Scholars to acquire appropriate new quarters.

Maintenance and Improvement of Buildings. The Institution currently occupies many older buildings of cultural and historical importance to the nation, such as the headquarters Castle Building, the Arts and Industries Building, the Old Patent Office Building, the original Corcoran Art Building, and the Barney Studio House. As time passes, these buildings will require added resources to assure their preservation and continued usefulness to the public and the Institution. In addition, many buildings of more recent construction will begin to require more attention.

At the present time, the Institution is devoting \$8,000,000 to \$9,000,000 of federal funds annually to the renovation and restoration of its buildings, exclusive of utilities, custodial care, and basic maintenance provided through the operational budget. While the annual figure may fluctuate somewhat, the Institution foresees a need to increase its renovation and restoration efforts to the level of approximately \$14,000,000 per year during the next five-year period. Management will make periodic assessment of the adequacy of this level of funding and, within the framework of future years' available renovation and restoration funds, the Institution will continue to make improvements at various locations. Included among these are such items as expanded tropical research facilities and improvements to the Barro Colorado Nature Monument under the supervision of the Tropical Research Institute in Panama and the Astrophysical Observatory's continued improvement of the Mt. Hopkins site. Beyond FY 1988, renovation, restoration, and modifications to existing space in Mall and other buildings for exhibitions, research programs,

access by the handicapped, safety and health, and general preservation of historic facilities will continue to be among the highest priorities of the Smithsonian.

If these improvements and additions to the Institution's physical plant occur, there will, of course, be related operating costs for necessary personnel, utilities, equipment and other items, to be funded largely through the federal appropriations process. While some operating and equipping needs have been factored into the S&E projections through FY 1988 for the Quadrangle, Museum Support Center, and facilities associated with the Zoological Park, it is too early to speculate about similar resources related to longer-range building possibilities. This will be done, however, as plans become firmer and as the time horizon shortens to the three-to-five-year period usually associated with legislative, appropriation, and construction cycles for physical plant additions.

As refinements are made to the Institution's long-range construction and operational aspirations, Congress, the Executive Branch, and other constituents will be kept fully informed through every means of communication, including the Prospectus.

ESTIMATED RESOURCES
ASSOCIATED WITH QUADRANGLE
PROGRAMS AND OPERATIONS
FY 1984-88
\$000

<u>Activities</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>	<u>FY 1988</u>
Program Operations <u>1/</u>					
Federal S&E	1,725	1,870	3,085	4,735	6,310
Trust Funds	15,015	15,970	16,940	18,040	19,115
One-Time Costs	-	-	5,550	875	-
Building & Grounds					
Maintenance					
Federal S&E	100 <u>2/</u>	105 <u>2/</u>	1,050	1,445	1,515
Trust Funds	-	-	-	-	-
One-Time Costs	-	-	230	-	-
Protection & Security					
Federal S&E	100 <u>3/</u>	105 <u>3/</u>	840	1,765	1,855
Trust Funds	-	-	-	-	-
One-Time Costs	-	-	1,660	-	-
Utilities	35 <u>4/</u>	40 <u>4/</u>	930	1,310	1,380
Total					
Federal S&E	1,925	2,120	4,975	7,945	9,680
Trust Funds	15,015	15,970	16,940	18,040	19,115
One-Time Costs <u>5/</u>	-	-	7,440	875	-
Utilities	<u>35</u>	<u>40</u>	<u>930</u>	<u>1,310</u>	<u>1,380</u>
Grand Total <u>6/</u>	16,975	18,130	30,285	28,170	30,175

1/ Program operations include the Sackler Gallery, Museum of African Art, National and Resident Associate Programs, Traveling Exhibitions, Visitor Information Offices, and the International and Education Centers. Figures include 1984-85 base operations for the Museum of African Art, all of which will be phased into the Quadrangle from present facilities as scheduling, construction, and the sale of Capitol Hill properties progress. Figures do not include Freer Gallery of Art base operations since they will not be redirected to Quadrangle activities but will permit various economies of scale, including administration of the Sackler Gallery which will be undertaken by Freer staff.

2/ Estimated horticulture costs in present Victorian Garden.

3/ Estimated protection costs at present Museum of African Art.

4/ Estimated utilities for present Museum of African Art.

5/ Presently projected one-time costs (equipment and moving expenses) are federal; trust one-time costs will be estimated at a later date for such items as museum shop, Associate requirements, food service needs, and other activities.

6/ Figures are based on a spring 1982 review of program and operating plans, with costs escalated by four to six percent per year to incorporate compensation and inflationary trends. Additional funds will be raised from trust funds and donors to augment exhibit programs and selected activities in dollar amounts that cannot be estimated at this time.

APPENDIX

SMITHSONIAN OPERATING RESOURCES FY 1975 - FY 1988
IN CONSTANT 1982 DOLLARS

This appendix eliminates inflation from the projected funding levels for FY 1982 through FY 1988 in the Prospectus and compares the resulting real (constant dollar) growth for this period to that experienced in previous years. Chart A displays resources of the Institution in constant 1982 dollars, or current purchasing power. Information for FY 1970 is also included for comparative purposes. Table 14 sets forth 1975, 1982 and 1988 financial resources by source of funds, in both actual as well as constant 1982 dollars. Federal fund estimates for FY 1983-88 have been discounted in accordance with inflation indices provided in the summer of 1982 by the Office of Management and Budget; and, in a similar fashion, trust fund estimates have been discounted by a factor of 3 percent computed cumulatively, a figure that units were instructed to use when materials were being assembled for the Institution's budget planning reviews. For FY 1970 and FY 1975, resources were inflated to 1982 constant dollars based on the Consumer Price Index.

FY 1975-82

In constant FY 1982 dollars, growth from FY 1975 to FY 1982 equates to some \$53,000,000, virtually all of which occurred in trust fund operations. FY 1975-82 was a period of healthy expansion of trust activities and associated resources. Gross trust fund income, composed of gifts, investment income and revenues generated by the auxiliary and bureau activities, expressed in constant FY 1982 dollars, grew by over \$59,000,000 during this period. Most of this growth resulted from expanded Associate programs, primarily the Smithsonian magazine; expanded operations of the museum shops; and new activities including the Mail Order Division, the Food Services Department, and the Direct Mail Division of the Press (formerly Smithsonian Exposition Books). In generating trust income, however, the expenses of the auxiliary and bureau activities increased in constant dollars by more than \$58,000,000, and net real income provided from all nonappropriated trust fund sources increased by only \$1,000,000.

Inflation has had the effect of virtually negating the impact of real program growth in federally funded activities. Adjusted for inflation, real program growth over the period totals slightly over \$3,000,000, in spite of major new federal support for operation of the museums, galleries and research facilities; initiation of the collections inventory; and equipment appropriations for the Museum Support Center. Even more dramatic is the effect of inflation on federal grant and contract levels, which, although increasing in actual dollars during FY 1975-82 by approximately \$1,000,000, have declined by \$9,000,000 in terms of constant dollars.

FY 1982-88

As detailed in earlier sections of the Prospectus, an increase in gross operating revenues of over \$163,000,000 is projected for the period from FY 1982 to FY 1988. Of this increase, some \$90,000,000 is attributable to inflation, primarily in areas such as pay and utilities, leaving approximately \$73,000,000 in anticipated real growth. Federal appropriations account for about \$45,000,000, or 62 percent of the projected constant dollar growth. Real growth in FY 1982-84 is associated primarily with equipping and operating the Museum Support Center, security and maintenance of the collections and physical plant, and automation and modernization of equipment. Over the longer run, real growth is associated with operation of the new Quadrangle facilities, strengthening of research and exhibition programs, animal care and propagation at Rock Creek and Front Royal, automation of the library system, modernization of security and protection services, and basic administrative and technical support.

Anticipated real growth in gross revenues of nonappropriated trust funds will amount to \$26,000,000, all of which is attributable to auxiliary and bureau activities. After deduction of expenses incurred in generating these revenues, net income expressed in constant dollars will increase by slightly more than \$1,000,000.

Real growth of \$2,000,000 is currently projected in the area of federal grants and contracts, primarily for work related to programs of the Astrophysical Observatory.

(In Thousands of Dollars)

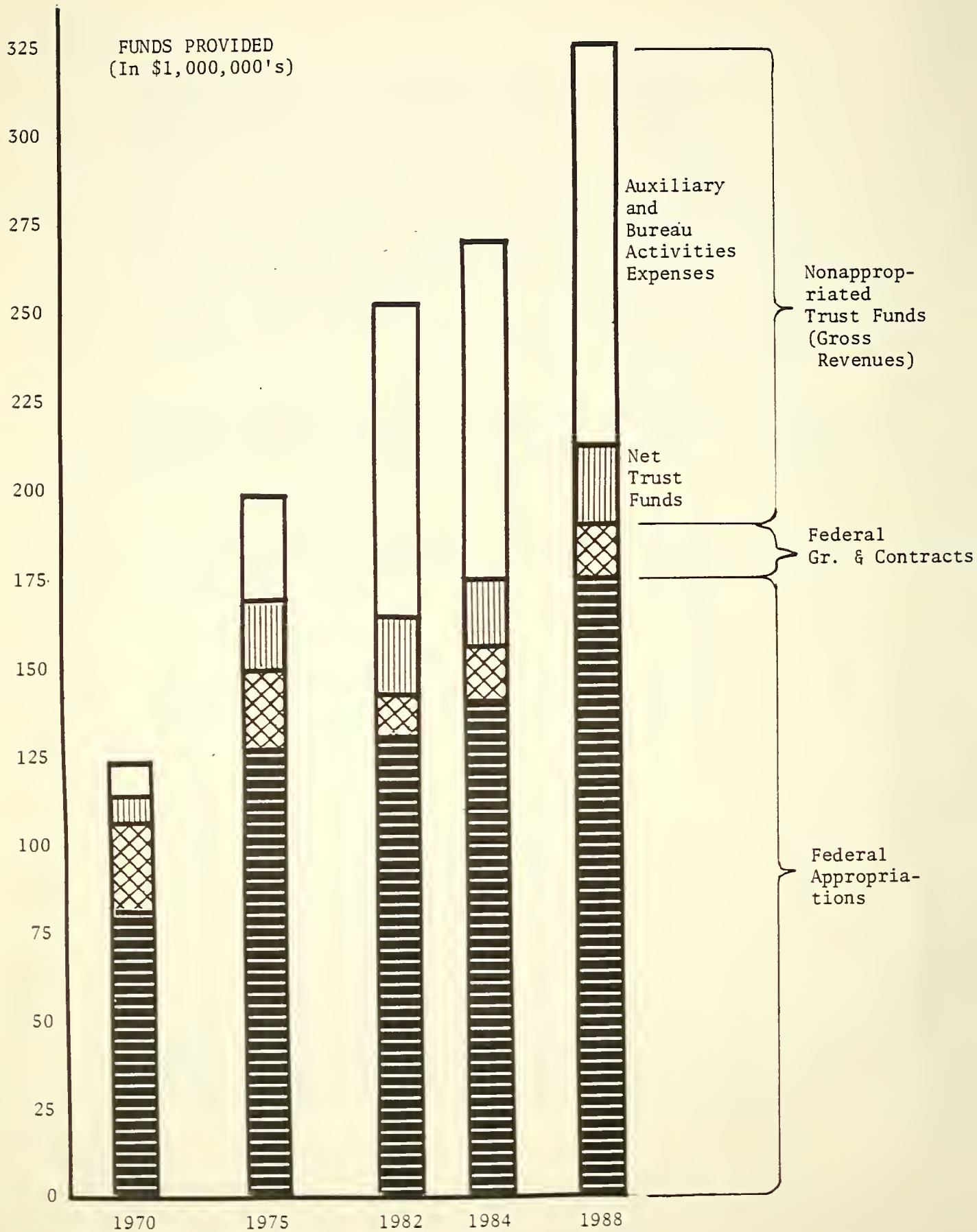
SMITHSONIAN OPERATING FUNDS

Fiscal Years 1975, 1982 and 1988 in Actual and Constant 1982 Dollars

	FY 1975		FY 1982		FY 1988	
	<u>Actual</u>	<u>In Con- stant \$'s</u>	<u>Base</u>	<u>Projected</u>	<u>In Con- stant \$'s</u>	
<u>FUNDS PROVIDED</u>						
Federal Appropriation - S&E	70,706	128,000	131,170	237,570	176,500	
Federal Grants and Contracts	12,344	22,400	13,217	17,789	14,900	
Nonappropriated Trust Funds:						
Investments	2,677	4,900	6,526	6,830	5,700	
Gifts and Miscellaneous	5,409	9,800	5,103	5,750	4,800	
Auxiliary and Bureau Ac-						
tivities Revenues (Gross)	19,228	34,800	97,350	148,494	124,500	
Less Related Expenses	(16,675)	(30,200)	(88,596)	(135,140)	(113,300)	
Auxiliary and Bureau Ac-						
tivities Net Revenue	2,553	4,600	8,754	13,354	11,200	
Total Nonappropriated Trust Fds:						
-Gross	27,314	49,500	108,979	161,074	135,000	
-Net	10,639	19,300	20,383	25,934	21,700	
Total Operating Funds Provided:						
-Gross	110,364	199,900	253,366	416,433	326,400	
-Net	93,689	169,700	164,770	281,293	213,100	

Smithsonian Institution Operating Funds - In Constant 1982 Dollars
Fiscal Years 1970, 1975, 1982, 1984, 1988

Chart A



SMITHSONIAN INSTITUTION

BOARD OF REGENTS

Under Separate Boards of Trustees:

JOHN F. KENNEDY CENTER
FOR THE PERFORMING ARTS

NATIONAL GALLERY OF ART

WOODROW WILSON
INTERNATIONAL CENTER
FOR SCHOLARS

THE SECRETARY*

AUDITOR _____ UNDER SECRETARY*

BOARDS AND COMMISSIONS

Archives of American Art Board of Trustees	National Armed Forces Museum Advisory Board
Board of Fellowships and Grants	National Board of the Smithsonian Associates
Cooper-Hewitt Museum Advisory Council	National Museum Act Advisory Council
Folklife Advisory Council	National Museum of African Art Commission
Freer Visiting Committee	National Museum of American Art Commission
Hirshhorn Museum and Sculpture Garden Board of Trustees	National Portrait Gallery Commission
Horticultural Advisory Committee	Smithsonian Council
Joint Sponsoring Committee for the Papers of Joseph Henry	Women's Committee of the Smithsonian Associates
National Air and Space Museum Advisory Board	

TREASURER*

Office of Accounting and
Financial Services
Office of Grants and Risk
Management
Business Management Office
Concessions
Mail Order Division
Food Services Division
Smithsonian Museum Shops

GENERAL COUNSEL*

Coordinator of PUBLIC INFORMATION*

Office of Congressional Liaison
Office of Public Affairs
Office of Special Events

Director of MEMBERSHIP AND DEVELOPMENT*

Development Office
Smithsonian National Associate
Program
Smithsonian Resident Associate
Program

Director of OFFICE OF PUBLIC SERVICE

Office of Elementary and Secondary
Education
Office of Smithsonian Symposia and
Seminars
Office of Telecommunications
Smithsonian Institution Press
Smithsonian Magazine
Visitor Information and Associates
Reception Center

Assistant Secretary* for SCIENCE

Chesapeake Bay Center for Environmental
Studies
National Air and Space Museum
National Museum of Natural History/
National Museum of Human
Evolution
National Museum of Paleontology
National Zoological Park
Office of Biological Conservation
Office of Fellowships and Grants
Radiation Biology Laboratory
Smithsonian Astrophysical Observatory
Smithsonian Tropical Research Institute

Assistant Secretary* for HISTORY & ART

Anacostia Neighborhood Museum
Archives of American Art
Center for Asian Art
Center for the Study of Africa
and the Americas
Sackler Gallery of Art
Cooper-Hewitt Museum
Division of Performing Arts
Hirshhorn Museum and Sculpture
Garden
Joseph Henry Papers
National Museum of African Art
National Museum of American Art
Renwick Gallery
National Museum of American
History
Office of American Studies
and Folklife Programs

Assistant Secretary* for MUSEUM PROGRAMS

Conservation Analytical Laboratory
National Museum Act
Office of Exhibits Central
Office of Horticulture
Office of International Activities
Office of Museum Programs
Office of the Registrar
Smithsonian Institution Archives
Smithsonian Institution Libraries
Smithsonian Institution Traveling
Exhibition Service

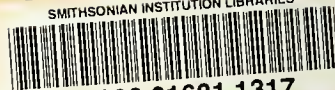
Assistant Secretary* for ADMINISTRATION

Contracts Office
International Exchange Service
Office of Equal Opportunity
Office of Facilities Services
Office of Design and Construction
Office of Plant Services
Office of Protection Services
Managerial Assistant Services
Office of Information Resource
Management
Office of Personnel Administration
Office of Printing and Photographic
Services
Office of Programming and Budget
Office of Supply Services
Travel Services Office

*Secretary's
Executive Committee

December 1982

SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01681 1317